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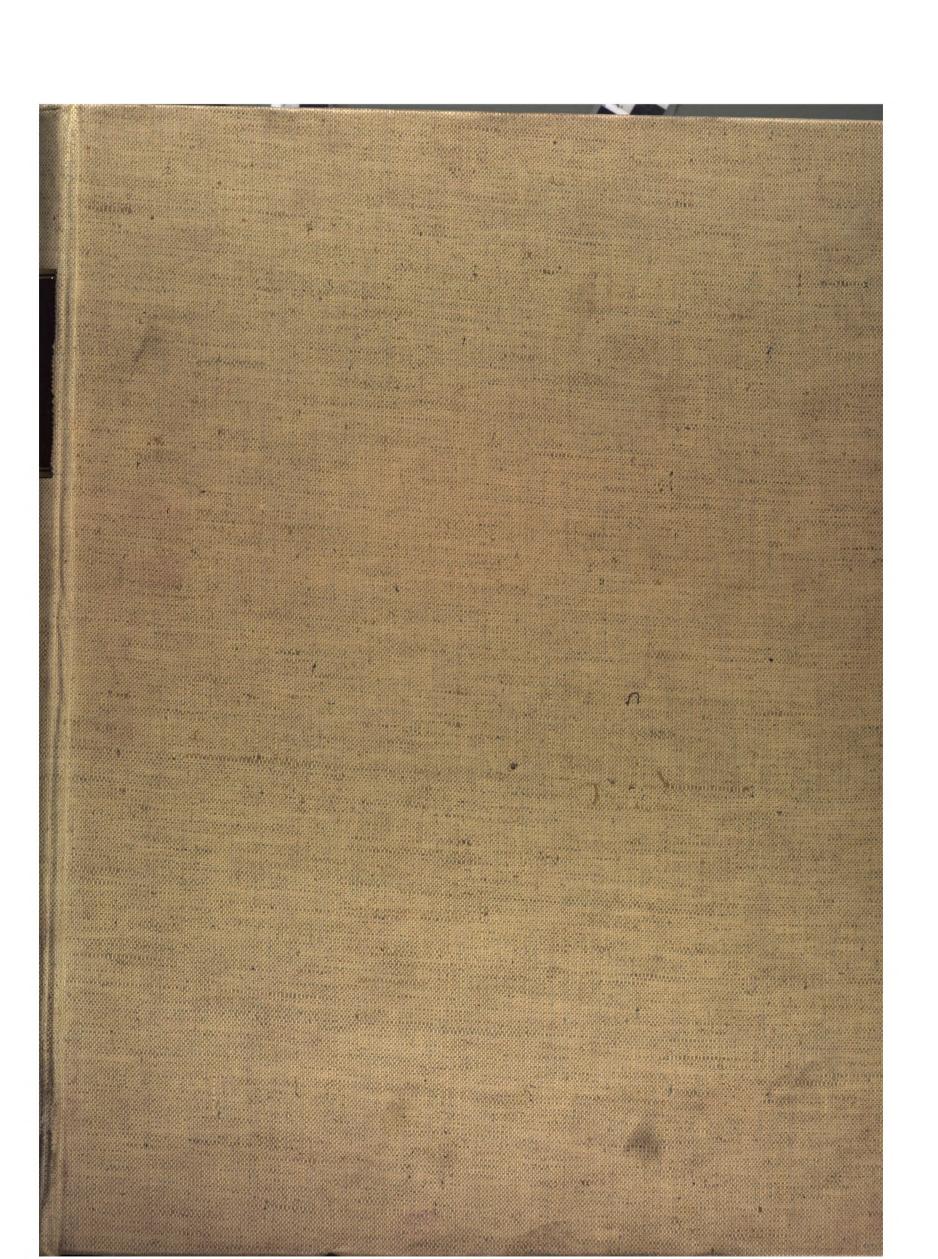
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## ARCHÆOLOGICAL RESEARCHES

IN

COSTA RICA

## ARCHÆOLOGICAL RESEARCHES

IN

## COSTA RICA

ВҰ

art je ke<sup>t in</sup> C. V. <u>H</u>ARTMAN

Illustrations by J. Cederquist, Photo-Engraver in Stockholm

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# ÅKE SJÖGREN, ESQ.,

THE ORIGINATOR OF THE PLAN UPON WHICH THESE RESEARCHES ARE BASED

AND THE GENEROUS DONOR OF THE MEANS FOR THEIR PURSUIT

AND PUBLICATION

THIS BOOK IS RESPECTFULLY INSCRIBED

ВΥ

THE AUTHOR.



The present volume, published entirely at the expense of Mr. ÅKE SJÖGREN, is based upon part of the very valuable collection, which has been brought together by his initiative and munificence and has been generously presented by him to the Royal Ethnographical Museum in Stockholm. I take this opportunity of expressing, on behalf of the Museum, sincerest thanks to its enlightened patron, and also to Mr. C. V. HARTMAN, who has so thoroughly and conscientiously carried out the donor's admirable idea.

Stockholm, Dec. 21st, 1901.

HJALMAR STOLPE
Director of the Museum.

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#### PREFACE.

Before I commence the main subject of the present work, it seems desirable for me to give a brief account of how I came to take up the researches in question.

My fellow-countryman, Mr. ÅKE SJÖGREN, to whom I have the honour of dedicating this work, spent a number of years in Central America, being occupied there as a mining engineer. In the course of the numerous tours he found time to make, he came across in many places traces of an early, well-developed, but long-lost culture. This circumstance induced him to resolve upon making archæological explorations at various places. Being himself prevented from carrying out these plans, he entrusted me with the fulfilment of them. Having at that time spent three years on C. Lumholtz' expedition to Sierra Madre in Mexico, I had gained some experience of field-work of a similar description and had acquired knowledge of Spanish-American life.

Having received thorough instruction from Dr. HJ. STOLPE in the investigation of graves, according to his well-known method for similar research in Sweden, I started for Costa Rica in the spring of 1896. In the beginning of May I was at work on the low-lying lands along the Atlantic Coast. In July I moved on to the highland valleys of the interior. There, in the valley of Cartago, the most extensive part of my explorations was conducted, the work taking me right on into March of the following year (1897). From March to September I was on the Pacific Coast, making investigations on the mainland, on the Guanacaste Peninsula and on the islands situated in the Gulf of Nicoya.

The archæological work I had set before me in Costa Rica being accomplished, I next turned my attention to ethnography in the Salvador Republic,

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making the Pipiles my special study. With that people I remained until the spring of 1899. Meantime, however, I had spent three months on a tour of investigation in Guatemala, keeping principally among the Xincas. In May of that year I found myself in the United States, where I was enabled by the kind generosity of Mr. Sjögren to remain for a space of nearly 6 months, which I employed in visiting and studying the principal museums. Since my return to Sweden in the autumn of 1899, I have been engaged in systematizing and cataloguing the extensive collections brought home to Sweden and in other preparations for this work.

To Dr. HJ. STOLPE I am greatly indebted for the continued interest he has shown in my labours from the start, and for the valuable advice and assistance he has always so willingly afforded me, more especially during the progress of the following pages through the press. I am under special obligation also to Prof. G. Retzius for valuable instruction kindly given me concerning anthropometrical research.

Of residents in Costa Rica, whom I desire specially to thank in this place, I may mention Dr. A. PIRRIE of Cartago, the well-known physician, who devoted much valuable time to me, assisting me in every possible way, Mr. Minor C. KEITH, Mr. A. G. STAINFORTH, Mr. J. F. GILLOT, Prof. C. RUDIN, Dr. JUAN FERRAZ, Director of the National Museum at San José, Don Anastasio Alfaro, Dr. Fran-CISCO IGLESIAS, Sra. Dolores Troyo, Dr. C. LIPPMANN and my own fellow countrymen, Messrs. C. Boltenhagen and J. Alfthan. Nor should I omit to put on record the appreciation I feel of the care exercised by Messrs. Rohrmoser and Co., in transporting my collections to Europe.

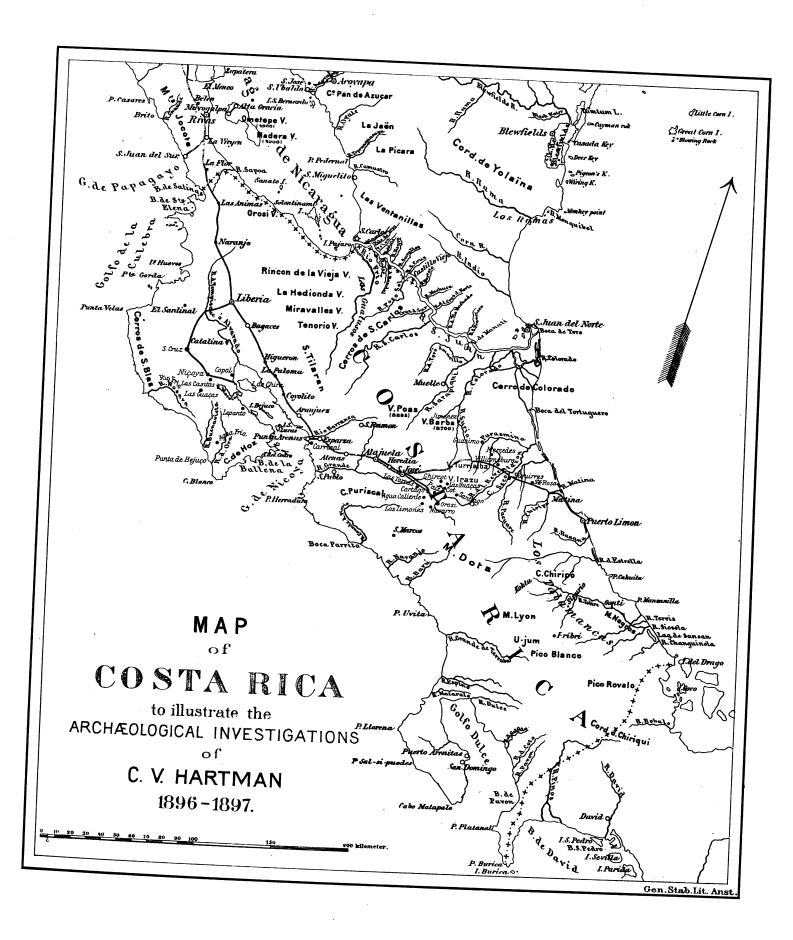
In Salvador the very enlightened Government greatly facilitated my investigations by letters of recommendation to the local authorities. I am specially grateful to the following gentlemen in that Republic for the great assistance and valuable information they gave me: Dr. CARLOS IMÉNDIA, Minister of Public Instruction, and Dr. Ruben Rivera, who most materially facilitated my anthropometrical researches amongst the Aztec soldiers of the Republic, Mr. Andreas BANG, Dr. SANTIAGO BARBARENA, Mr. C. MELVILLE, the British Consul, Col. Lucas Peñate and Don Antonio Hernandez.

My thanks are also due to Mr. J. CEDERQUIST for the illustrations so artistically executed, and to Mr. Olof Sörling, the skilful artist of the Royal Archæological Museum in Stockholm, who has carefully reproduced the figures in the text.

Stockholm, Dec. 21st. 1901.

C. V. HARTMAN.

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#### INTRODUCTION.

ith the exception of the very extensive archæological excavations carried on during the last two decades in Honduras, principally at the famous ruins of Copan, first by A. P. Maudsley, and afterwards by the Peabody Archæological Museum, scarcely any systematic work has yet been reported from the Atlantic slope or coast of Central America.

My researches in Costa Rica began on the Atlantic Coast. Although the work carried out was far from extensive, the results obtained are of interest, throwing as they do some light on the ancient culture of a region hitherto practically unexplored.

Nearly all the objects in museum collections from Central America have been obtained from the highland plains or the West Coast. The reasons are obvious. On the East Coast, the tremendous rains which pour down, with short intervals, for 8 or 10 months of the year, make all work in the open extremely difficult. Even during the short, irregular, so-called dry season, the explorer encounters many more hindrances here than on the open grass mesas and cultivated territory of the plains of the interior, or on the Pacific Coast, where considerably longer, and far more regular, dry seasons prevail.

On the Atlantic side, the moisture-laden atmosphere and tropical heat have clothed the mountain chains and the low swamp-lands with eternal verdure, — with forests which are almost impenetrable, woven together as they are by lianas passing from tree to tree. Neither aboriginal nor Spanish culture ever made great inroads on the primeval forests of the Atlantic Coast. In Central America,

the Spaniards settled principally on the cool and comparatively healthy highlands, where the climate, during a greater part of the year, is fairly similar to that of old Spain. It is only during the last few decades that Anglo-Saxon enterprise, in various places on the Atlantic Coast, has commenced to pierce the jungles with railroads, thus opening up the country for cultural purposes.

The fact of the first railroad having been built along the coast of Costa Rica gave me the opportunity of reaching places previously inaccessible. This railroad runs from Puerto Limon, the Atlantic harbour of the Republic, at a distance of about 20-25 kilometres from the coast, almost up to the frontier of Nicaragua. Along this railroad, which in several places cuts the lowest spurs of the high sierra, numerous banana farms are situated, intersected by swamps and forests. No Indian settlements are now left in these coast-lands. The destruction of the Indian villages dates back to the first conquest by the Spaniards. The great discoverer of the New World, himself, began the series of bloody persecutions and crimes against the peaceful and hospitable native tribes, which were afterwards continued by the Spaniards for centuries, and in Costa Rica with scarcely less ferocity than elsewhere. The chronicles of Las Casas, Oviedo, and Torquemada, as well as the pages of the Italian writer Benini, tell the story of the depopulation of the greater part of Costa Rican territory in consequence of destructive wars, excessive taxes, slavery, and inhumanities of every description. The Spaniards were not, however, the only persecutors of the unhappy aboriginals. In the seventeenth century a new plague threatened their existence on the Atlantic Coast. English slave-raiders from Jamaica and the Mosquito Coast, with crews of negroes, began to visit these shores and ascend the rivers in canoes, in search of slaves. Village after village was destroyed, and the inhabitants were captured or killed. These continued raids almost exterminated the Indians in these parts. Only occasionally can Indians now be seen along this railroad, a few Talamancas from the south, who visit Puerto Limon for barter, or Chiripoes, who have come down from their mountain homes to find temporary employment at the banana farms of Matina. The only population to be found in these regions at the present day, is at the stations and banana farms along the railroad, and it consists principally of Africans and a few East Indian coolies from Jamaica, with their overseers, German and American planters and merchants. Most of the houses are built on high poles, and at some places the strange sight is to be met with of whole communities of modern pile-dwellings, with all the houses or huts placed high in the air, each house resting on four posts. The vulehunters» from Nicaragua, who until lately, during the »dry» season, used to make excursions to the interior of these forest lands, in search of the valuable product

of the rubber-tree, are now seldom seen, since the trees have almost everywhere been destroyed. It has been while clearing the forest for the railroad, or for the cultivation of the soil, that the new pioneers and settlers, from time to time, have laid bare ancient burial grounds and other remains. A preliminary survey during visits to the various stations along the railroad soon convinced me that there were graves to excavate in several places close at hand. The present population along the railroad, as a rule, know hardly anything of the interior of the mighty, trackless forests which extend on both sides. The white managers seldom stay in this unhealthy, hot climate more than a very few years, and during this time their occupation keeps them at their haciendas and they have no interest to penetrate more than the outskirts of the pathless and inhospitable jungle. The black labourers, a still more shifting population - returning to their native island as soon as they have saved enough money - also keep close to the railway-track, the only road there is in the whole region. I therefore found it impossible to procure any guide for the »tierra incognita» of the lowland forests between the railroad and the Atlantic.

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### A.

RESEARCHES ON THE EAST COAST.

# THE GREAT MOUND AND WALLED ENCLOSURE AT MERCEDES.

n my arrival in the beginning of May, the rainy season had already set in. The only thing to be done was to select a field somewhere along the railroad. To enter the forests with men and beasts, without a guide, in quest of fields for archæological research, would have been a hopeless undertaking. As the most promising ground I turned to the ancient remains near the hacienda of Mercedes, where one of my native informants stated that an extensive mound and other marks of ancient habitation existed. When the railroad was being constructed, this ancient centre for Indian culture attracted attention, and several large stone idols had been removed and presented by Mr. Minor C. Keith to the National Museum in Washington.

The mound is situated about 300 m. west of the Rio Novillo, an affluent of the Rio de la Reventazon, on the estate of the hacienda mentioned, at the very outskirts of the forests, which, from this spot, interrupted only by swamps and lagunas, stretch down to the Atlantic. Some twenty minutes' walk in a westerly direction brings one to another river, the Camarron, also a tributary of the Reventazon. Both rivers transmit considerable quantities of water all the year round; water, which, descending every day from the high altitudes of the Costa Rican table-land, is always cool and, as a rule, clear as crystal, except during the heaviest downpours of the rainy season. The rivers of these regions then rise to a great height, the water becomes muddy, carrying down immense masses of branches and fallen trees, both dead and living.

A thick undergrowth of bushes, creepers, and high green grass, which reached up to our shoulders, covered the whole mound and its surroundings.

Only after the "machete" and axe had done their work, and the ground had been partly cleared, could the ancient remains be more accurately observed, and measurements taken. With the help of three negroes, two Costa Rican natives, one Peruvian, and a German sailor, the work was started.

The preliminary clearings revealed a large truncated mound (A on the plan and Pl. 1, Fig. 1), which on three sides was surrounded by stone walls (B, C, D Fig. 1). The grass having been cut down at the base of the mound, a large stone figure (Pl. 3, Fig. 1) was exposed to view, lying on the ground (at a on the plan); close to the first, three more, badly mutilated stone-figures (at c, d, and e) were also to be seen.

The measurement of the almost circular, central mound gave a diameter at the base of about 30 m., at the top of 20 m., and a height of 6.5 m. Excava-

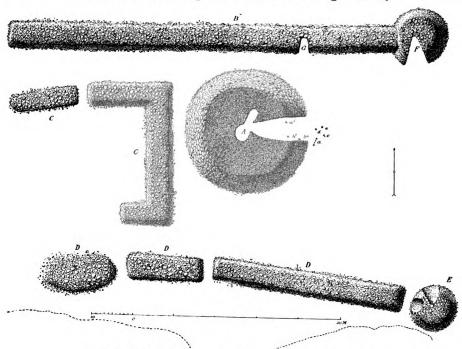


Fig. 1. Plan of the great mound and the stone walls at Mercedes.

tions were begun at this mound; the work could proceed but very slowly, as no large gang of men was obtainable, and heavy rains often interrupted the work. After the grass and a layer of soil, some 50-80 cm. thick, had been removed on the eastern slope, the spade struck a compact stone wall of oval, flat, riverworn stones, each from 30-60 cm. in length, placed in almost regular layers. These stones had evidently been selected for the purpose. This wall, of the

same height as the mound, and sloping at an angle of 50 degrees, surrounded the whole mound, being about 4 m. thick at the base. It was hard work to break through this compact mass in order to open a trench for the investigation of the interior. The second day after beginning the trench we met, on the slope of the mound, with the companion (Pl. 1, Fig. 2 and Pl. 3, Fig. 3) to the large statue at the base. This figure (at b on the plan) was almost covered with soil, and also mutilated. All these figures were previously known to the people living near. Judging from their present position on the slope, and at the base of the mound, it was apparent that they had originally stood on the platform of the mound. To ascertain the exact spot now seemed hopeless. But one circumstance, which I had at first considered very unfortunate, viz., the mutilation of the idols, gave the clue to determining where the two principal statues had stood. Inside the stone wall only black soil was met with, but close to the top, about 60 cm. from its surface and about 1.2 m. from the edge of the platform, the iron bar struck some heavy stones. When fully exposed to view, they proved to be a number of oblong stones, each about 1 m. long, set in a narrow square and very firmly fixed. Placed in an upright position in the centre of this socket (at a' on the plan) we found the broken part of the left leg of the statue (Pl. 3, Fig. 1), which was lying at the base of the mound, while 3 m. to the right of this socket, the corresponding socket (at b') of the companion figure was met with, but the stones had, in this case, been partly disturbed by the fall. Only the first socket had proved absolutely firm and had kept the broken limb in its stony grip, when the unknown iconoclasts of the past desecrated the place.

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Continued work on the trench, which was opened to the breadth of some 4.5 m. to the centre of the mound and from thence to both sides, revealed hardly anything but black humus containing a few scattered legs of earthenware vessels, potsherds, and broken stone implements, which had been thrown in with the soil. At about 1 m. distance from the ground, however, there was an almost continuous layer of the same kind of oval stones of which the wall was formed. Underneath this, there was again found black humus down to the bottom. Another find, for the raison d'être of which I could discover no explanation, was a layer of red ochreous soil, about 10 cm. thick which at the height of 4 m. above the base, passed through the mound, perhaps throughout the whole of it. Some burning had perhaps taken place here 1. The ground

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<sup>&</sup>lt;sup>1</sup> When, during the following year, I visited a famous burial-place, Las Guacas» near Nicoya on the Pacific side, the laborers, who for years had excavated there, told me they had met with a similar layer of red soil running through a great portion of this cemetery.

underneath the mound was examined in several places, but the hard clay proved to be entirely intact. Interments might possibly have taken place in some other parts of the mound, but time and circumstances did not allow me to continue the seemingly fruitless task of digging through the whole mound, which, besides, would have been a very expensive undertaking.

This mound had been so constructed that the stone wall had been first built, and the interior had then been filled in with soil. The ground surrounding the whole enclosure was covered with a deep layer of black humus. When digging in this, water-worn stones of all sizes were met with in great abundance. For the wall of the mound, stones had been selected apparently only of a certain shape and size; oval, flat, and from 30-60 cm. long. The black soil had been carried in blankets, or baskets, and emptied inside the high wall. In the whole yard east of the mound not a single stone was left, and only a comparatively thin layer of humus, formed after the construction of the mound, now covered the hard, level floor. The purpose of this mound seems to have been to serve as a platform, or temple, for the large statues, which were placed with faces towards the rising sun. It is possible that the whole mound was then covered in with some kind of wooden structure with thatched roof. The flat stone walls apparently only served for enclosures. A number of rather large stones, found not far below the surface in the very centre of the mound, might possibly have served to support the main pillar of the roof.

### DESCRIPTION OF THE STONE FIGURES.

a. Large human figure (Pl. 3, Fig. 1), male, mutilated, standing with hands on hips. Height 1.8 m., breadth between the elbows 0.82 m. The head is disproportionately large. The face has a rather determined, calm expression, principally caused by the corners of the mouth being drawn down; the nose is large, with wide nostrils; the eyes oval; the ears are very large and prominent, the lobes adorned with ear-plugs. The figure is naked, except that the head is covered with a conical hat. The chest and back are crossed by two thick ropes, which pass over the shoulders and reach down to the hips. On his right wrist the figure supports a human head. The nails of the hands and feet are plainly indicated. The left leg was found standing in the socket, the stones of which reached almost to the knee of the figure.

The hat (Pl. 3, Fig. 2) of the aforenamed statue is decorated with four animal figures in bas-relief, each having a long nose, bent upwards, outstretched

tongue, and grasping with the right forefoot a queue-like extension from the vertex. Diam. of the hat about 38 cm. See Text-figure 2.

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ly a und, nave ced hen flat b. Human figure (Pl. 3, Fig. 3), male, mutilated, also standing with both hands on hips; resembles the former figure, but is somewhat larger, with heavier built trunk and limbs. Height of figure 1.85 m.; breadth between the elbows 1.07 m. The conical hat is smaller than that of the first figure, and without any ornament.

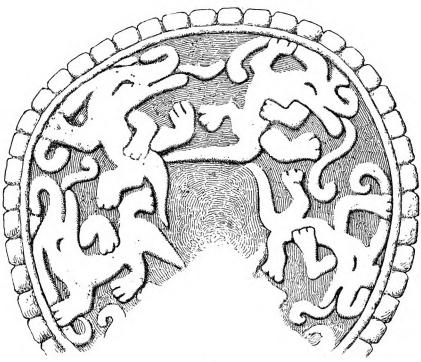


Fig. 2. (1/3).

- c. Human figure (Pl. 2, Fig. c), male, almost of natural size; legs and right arm missing; the left hand held against the chest, grasping by its plait a small female head with eyes closed, which hangs down on the shoulder of the figure. Length of the whole mutilated body 1.1 m. Height of the female head (Pl. 4, Fig. 2) 14 cm.
- d. Human figure (Text-figure 3 and Pl. 2, Fig. d), male; head, legs, and right arm missing. The figure bears in its left hand a small human head. The limbs are decorated with double-spiral tattoo-marks, or paintings. Length of the mutilated body 0.75 m. This representation of the double-spiral ornament I

later found painted on several clay vessels in the graves of the highland plains. Its derivation from a combination of two birds can be traced on these paintings.

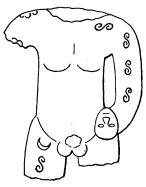


Fig. 3.  $(^{1}/_{15})$ . From sketch in the field.

e. Alligator (Pl. 2, Fig. e); head missing; tail short, turned in between the legs. Length of the trunk 0.9 m.

Only the two large images (a and b) were with the kind permission of Mr. Keith added to the collection and are now in the Museum of Stockholm; the three others were left, except the above mentioned woman's head, which, contrary to my express orders, was cut off by one of my workmen.

Leaving the large mound to be completely explored by some future investigator, I turned my attention to the smaller mound (F on the plan) at the end

of the northern stone wall. This mound measured at the base about 14 m. in diam., and the truncated top about 8 m. in diam.; its height was 3.5 m. In this case also a trench was opened to the very centre, passing close to the ground.



Fig. 4 (1/4).

This mound proved to be built entirely of stones of varying sizes. On the top of the platform an oblong water-worn, natural boulder of peculiar shape was lying. It was about 1.5 m. in length, and very heavy. Among the stones near the top we found a human head of stone (Pl. 4, Fig. 3), which had been broken

off from a trunk, now missing. This head, which is of almost natural size, has very prominent jaws, the teeth being clearly distinguishable, the eyeteeth very large; the vertex engraved with a characteristic ornament, a kind of swastika (Text-figure 4). Height of the head 23 cm., breadth of the face 16 cm.

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The opposite mound (E) at the end of the southern wall (D) had been opened some years ago in two places; on, or near the surface of the same, two stone idols had been found and removed. This mound measured at the base some 10 m. in diam., at the top 8 m.; its height was 2.5 m., being also built entirely of stones. The last figure obtained on this spot was still lying in the mud of the pig-sty, underneath the \*corps de logis\* of the hacienda and was added to my collection. It is the figure of a man, with legs mutilated (Pl. 4, Fig. 1), 42 cm. high from the knee, breadth across the shoulders 22 cm. The right hand covers the lower part of the abdomen; the left is held on the back; the hair is laid in ridges; mouth protruding; ears prominent.

The material of all these figures is a very hard basalt lava, the surface of which, when long exposed to the elements, plainly shows its cellular structure.

A short trench opened to the centre of the wall (B) at the point (G) proved it to be built entirely of stones. A few small fragments of red pottery, resembling those from the central mound, were met with, scattered between the stones.

Of the smaller objects aforementioned, found scattered in the soil of the large mound, the following, being of greater interest, are reproduced among the illustrations.

- a. Rubbing or grinding stone (Pl. 4, Fig. 4) of basalt lava, oblong, flat, 14 cm. in length.
  - b. Fragment of a rubbing stone (Pl. 4, Fig. 5).
- c. Ball of stone, (Pl. 4, Fig. 6) river-worn pebble, greenstone, 9 cm. in diam.
- d. Ball of stone (Pl. 4, Fig. 7), small, river-worn pebble, probably for polishing, 5 cm. in diam.
- e. Polished celt of greenstone, with elliptical section; 9.5 cm. long. (Pl. 4, Fig. 8).
  - f. Fragment of a celt of greenstone. (Pl. 4, Fig. 9).
  - g. Head of a bird (parrot?) of clay, 3 cm. broad. (Pl. 4, Fig. 10).

#### II.

#### GRAVES AT MERCEDES.

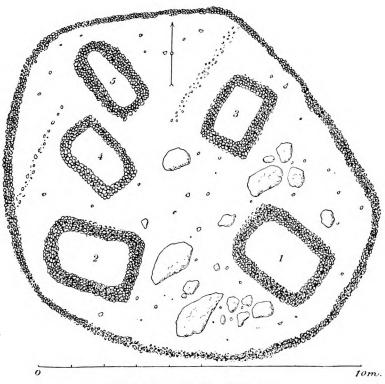
n the thick forest, bordering on the aforesaid enclosure, there were a number of graves which had been previously opened. The heavy stone slabs, which had covered the graves, were thrown aside, the once emptied space being now half filled with soil and dead leaves. We cleared a few of these graves without finding anything but a few fragments of broken pottery. The graves were all of the same shape - oval or rectangular - and with the walls formed by layers of flat, oval, water-worn stones. The search for any unopened grave was, for several days, in vain. The extremely luxuriant tropical vegetation which often excludes even the sunlight, hides almost everything from sight. The 'machete' but slowly opens, step by step, a narrow path to the traveller, who finds the ground covered with a thick carpet of humus and dead leaves. Therefore, as a rule, no traces of potsherds, or flakes of stone-implements, are visible on the ground. Similar finds, as is well known, in regions with a drier climate, are always the surest signs of the proximity of ancient settlements, or places of sepulture. Only after many a long search in the thorny thicket, beneath the gigantic forest trees, some graves were discovered, which had not previously been opened.

They were arranged in small groups inside a common and almost circular platform, or enclosure, usually of about half a metre in height, the slopes of which were formed of stones of various sizes. These stone borderings, however, were now to a great extent covered with soil and grass.

The following groups, or platforms were excavated and duly recorded. Group I (Fig. 5).

At about 300 metres distance from the great mound, the first group of graves was found which had previously not been disturbed. The low platform

(Fig. 5) was situated on a somewhat elevated slope near a small creek. It was almost circular in shape, about 10 m. in diameter. The height above



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ar of Fig. 5. Group of graves. I. Mercedes.

the ground was on the southern and western side almost half a m.; on the other two sides it was on a level with the surrounding ground. The slop-

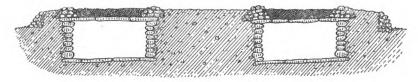


Fig. 6. Section of a platform with two graves. Mercedes.

ing sides were formed by a wall of oval, flat, water-worn stones. The surface of the ring was strewn with large and small stones of all sizes. A thick undergrowth of thorny bushes and creepers had to be cleared away before the five oblong graves could be plainly seen.

Grave 1. (Figs. 7-9).

Almost rectangular bordering of stones, protruding about 10 cm. above the level of the ground. The space inside the bordering was filled with soil. Length of bordering 3 m., breadth 2.2 m. About 60 cm. below the surface, we struck

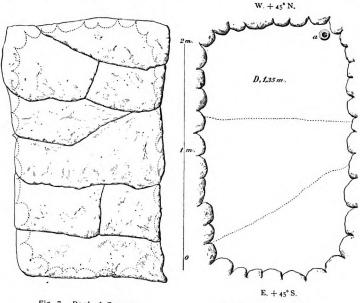


Fig. 7. Roof of Grave 1.

Fig. 8. Interior of Grave 1.

the roof of the grave consisting of several large slabs (Fig. 7) which closed upon each other without the use of any cement. These slabs were from 15-20

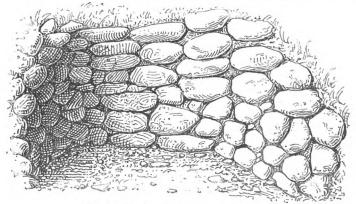


Fig. 9. Side-view of the interior of Grave. I.

cm. thick. The grave (Fig. 8), seen from above, was formed by walls of flat water-worn stones, placed in more or less regular layers. These stones, as a rule,

n. above the oil. Length

were about 25—30 cm. long, 6—8 to 10 cm. thick. The grave was filled with loose soil, which near the bottom was of considerably darker color. Length of grave 2.25 m., breadth 1.3 m., depth 1.35 m. The bottom consisted of three large slabs of the same kind as those forming the roof. Pieces of charcoal and a few pebbles were scattered in the soil. A small earthen vessel (a) was found standing near the N. corner, 1.05 m. below the roof.

a. (Pl. 5, Fig. 1). Flattened globular vessel with narrow mouth; a rounded, raised ridge encircling the shoulder. The rim is almost horizontal. The ware is rather thick, painted a reddish-yellow. Height of vessel 8 cm., diameter 10 cm., do. of orifice 5 cm. Thickness of ware 1 cm.

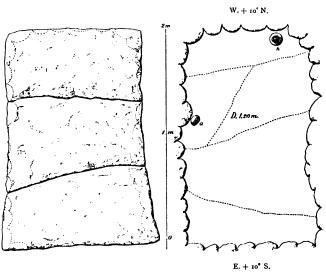


Fig. 10. Roof of Grave 2.

Fig. 11. Interior of Grave 2.

Grave 2. (Figs. 10, 11).

Rectangular bordering of stones, protruding about 15 cm. above the surface of the platform. Length of bordering 3 m., breadth 2.1 m. About 60 cm. below, the roof of the grave was struck, consisting of three large, rectangular slabs (Fig. 10), about 20 cm. thick. The uncovered grave (Fig. 11) was 2 m. in length, 1.2 m. in breadth and 1.2 m. in depth.

The walls were formed exactly in the same manner as those of Grave 1. The bottom consisted of several slabs. The grave was filled to 5 cm. below the roof with soft soil, which, near the bottom, was obviously darker and contained one small vessel (a), standing near the S. wall, 60 cm. below the roof, and one

somewhat larger pot (b) in N.W. corner close to the wall, 90 cm. below the roof. Both these vessels contained soil with traces of charcoal.

a. (Pl. 5, Fig. 2). Almost globular bowl with wide mouth and narrow, flaring rim. The bowl, of a reddish-yellow color, was covered with soot which had become almost indelible, showing that the vessel for some considerable time was used as a cooking utensil. The ware is fragile and thin, being only 0.4 cm. in thickness. Height of vessel 7.1 cm., diam. 10.3 cm.

b. (Pl. 5, Fig. 3). Almost globular, broken, very roughly manufactured vessel, with walls of varying thickness (0.3—0.6 cm.) High, flaring rim. The whole vessel was covered with soot. The clay is rather coarse. The vessel was filled with soil, which contained traces of charcoal. Height 12.6 cm., diam. 12.8 cm.

Grave 3. (Fig. 12).

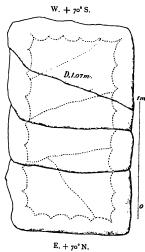


Fig. 12. Grave 3.

Rectangular bordering of stones, about 20 cm. higher than the surface of the platform. Length of bordering 2.3 m., breadth 1.65 m. The roof of the grave was met with 30 cm. below the surface and consisted of four large slabs. The grave was 1.65 m. in length, 0.8 m. in breadth, and 1.07 m. in depth. It was filled with loose soil, darker near the bottom, containing soot and small pieces of charcoal. No other contents. The bottom consisted of five slabs.

Grave 4. (Figs. 13, 14).

Almost rectangular bordering of stones widening at the N. W. end, protruding about 15 cm. above the platform. Length of bordering 2.4 m., breadth at the S. E. end 1.4 m., at the opposite end 1.6 m. At the depth of 75 cm. the roof (Fig. 13) was met with, consisting of four very large heavy slabs, about 25 cm. thick. The grave (Fig. 14) was 1.8 m. long, at the S. E. end 0.9 m. and at the opposite end 1.1 m. broad, depth 1.05 m. The bottom consisted of a number of slabs of various shapes. In the W. corner,

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ng he n. we found two vessels standing, the first (a), 65 cm., and the other (b), 72 cm.

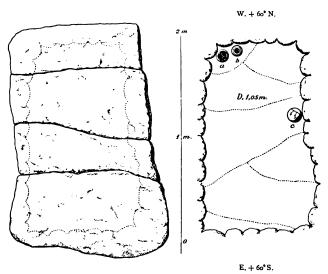


Fig. 13. Roof of Grave 4.

Fig. 14. Interior of Grave 4.

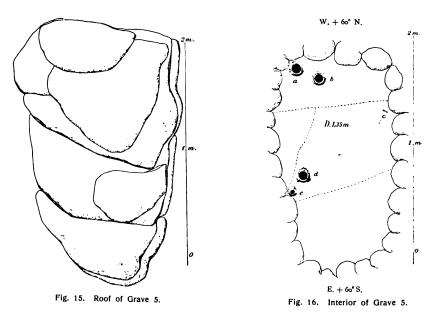
below the roof; close to the N. E. wall was placed a third vessel (c), turned upside down 45 cm. below the roof.

- a. (Pl. 5, Fig. 5). Flattened globular, wide-mouthed, broken bowl of coarse clay, very roughly manufactured, without signs of a smoothing process. The whole vessel was covered with soot. Rim almost gone. Height of bowl 8.5 cm., diam. 12.8 cm., thickness about 0.5 cm.
- b. (Pl. 5, Fig. 6). Flattened globular vessel with a double-twined cord encircling the shoulder. The ears are formed by two degenerate animal heads, perforated, having each three small punctate markings, representing the mouth and eyes. The color is of the same reddish-yellow as that observed in the vessels above. The whole is covered with soot. The bottom retains marks of three missing feet. The circular spots are now covered with soot, showing that the bowl, even after the loss of the feet has been used as a cooking utensil. Ware, fragile, thin. Height of vessel 7.3 cm., diam. 10.5 cm.
- c. (Pl. 5, Fig. 4). Pot, almost globular, very roughly and carelessly made, with rather high rim. On the shoulder are placed at intervals five oblong nodes, ornamented with from two to three parallel rows of punctate markings. The vessel was covered with soot and shows only traces of the red-yellowish

paint. It was filled with soil, containing fragments of charred corn-cobs. Height of vessel 11.2 cm., diam. 13.5 cm., diam. of the mouth 8.5 cm.

# Grave 5. (Figs. 15, 16).

Almost oblong bordering of stones protruding 20 cm. above the surface of the platform. Length of bordering 2.55 m., breadth about 1.4 m. About 60 cm. below the surface, the roof (Fig. 15), was met with, composed of several large slabs of various shapes, partly overlapping each other; thickness as usual. The grave (Fig. 16) was 1.8 m. in length, 1.05 m. in breadth at the S. E., and 0.75 m. at the opposite end; depth 1.35 m. The bottom consisted of



four slabs. In the W. corner, close to the wall, 90 cm. below the roof, we found a bowl, a, (Pl. 5, Fig. 10) and at 24 cm. distance from the S. E. end, at the same depth, another vessel b, (Pl. 5, Fig. 9). Close to the latter a few very small fragments of bone in almost meal-like condition were traceable. At 6 cm. distance from the N. E. wall, at c, 84 cm. below the roof, an oblong bead of blue glass, broken into pieces (Pl. 5, Fig. 7) was found. At 20 cm. distance from the S. W. wall, 75 cm. below the roof, stood a tripod vase, d, (Pl. 5, Fig. 8) and close to the same, but 12 cm. deeper, a small jar, e, (Pl. 5, Fig. 11). At the depth of about 90 cm. we distinguished an obviously darker layer of soil, containing traces of bone and reaching to the bottom. The grave was filled

to the roof with soil at the S. E. end, but from about the middle of the grave, under the roof, there was an open space 8—10 cm. high towards the other end.

- a. Flattened globular, wide-mouthed bowl (Pl. 5, Fig. 10), ornamented on the shoulder with four semicircular fillets, each having a double row of punctate markings. One of these fillets is turned upside down. Between the fillets there are rectangular fields, ornamented by scratching. One of these rectangular fields contains two crosses; the other is intersected by irregular lines. Vessel covered with soot. Color originally reddish. Height 9 cm., diam. 13.5 cm.
- b. Globular vessel (Pl. 5, Fig. 9) with rather wide mouth and flaring rim, somewhat damaged. This vessel, of the same color as the last, is also covered with soot. The soil in the vessel contained traces of charred corn. Height 12 cm., diam. 12.6 cm., thickness about 0.5 cm.
- c. Oblong, broken bead (Pl. 5, Fig. 7) of bluish-green glass, more than 4.5 cm. long, (central part missing) of a quadratic section, each side measuring 0.6 cm. Both ends have the four corners ground off, thus showing small, triangular facets. This bead consists of three different layers: first a rather thick central tube or hollow rod of light-green color, then a thin layer of opaque white, and last, a somewhat thicker of bluish-green color, forming the surface.

This bead undoubtedly belongs to the »Millefiori» beads (misnamed Aggry beads)<sup>1</sup>, although simpler in appearance and construction than the so-called »normal» forms, where the layers are stellated. Later on I discovered a number of this kind in a grave at Orosi in the highlands.

The once important industry of »Millefiori» beads flourished in Venice during the latter part of the 15:th century and from this city the artistic products of manufacture were distributed to various parts of the globe. The archæologists know at least the normal forms from finds in several European countries, from Egypt and Nubia, from the two Americas, and islands near New Guinea.

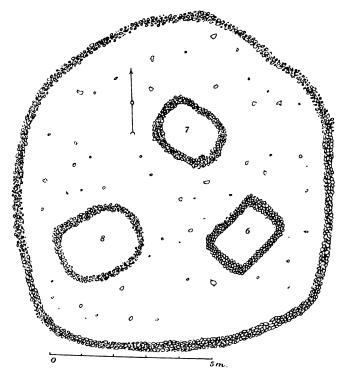
The simple form represented by the specimen found at Mercedes has also been discovered in Nicaragua, by Dr. E. FLINT. The Peabody Arch. Museum now owns these specimens, labelled "Dead Man's Island, Lake Nicaragua, found during the year 1883 in a jar, in a burial place, surrounded by stones". Identical beads have also been found in Indian graves in various parts of the United States.

¹ TISCHLER, M. O. Ueber Aggry-Perlen und die Herstellung farbiger Gläser im Alterthums. — Sitz. Ber. d. Phys. oekon. Ges. zu Königsberg 1886, p. 5–15: — See also Congr. intern. des Americanistes à Berlin 1888, p. 97—104.

d. Tripod vase (Pl. 5, Fig. 8) with flaring rim and two handles in the shape of very degenerate animal heads. Below the rim are two encircling lines of punctate markings, the margin of the rim itself being ornamented with vertical impressions. The legs are hollow and have the form af grotesque animal figures. Each leg has a vertical slit underneath and contains a small ball of hard clay, which rattles when the vessel is shaken. The color is reddishbrown. The vessel shows no signs of having been used for cooking. Height 9.7 cm., diam. 12 cm.

e. Globular jar (Pl. 5, Fig. 11), with narrow neck; rim almost upright vertical handle on the shoulder. Traces of soot outside. Color, reddish-brown. Height 9 cm., diam. 8.6 cm., diam. of the aperture 3.5 cm.

#### Group II. (Fig. 17).



Flg. 17. Group II. Mercedes.

About 100 m. east of the first group, a second platform was found, almost circular in shape, some 10 m. in diam. Height of the southern half nearly one

metre, of the northern, hardly more than a quarter of a metre. The bordering was formed in the same way as that of the first circle. Three oblong stone borderings marked as many graves within the platform.

#### Grave 6. (Fig. 18).

Oblong stone bordering about 15 cm. high. Length 2.3 m., breadth 1.7 m. About 45 cm. below the surface, three large, heavy stone slabs were met with, forming the roof of a grave 1.4 m. long, 1 m. broad, 0.75 m. deep. The bottom slabs were of the same number as those of the roof. It was filled with loose humus, the layer nearest the bottom being darkest, containing a few traces of charcoal, but no other objects.

#### Grave 7. (Fig. 19).

Oblong stone bordering about 15 cm. high. Length 2.2 m., breadth 1.8 m. The roof — met with about 60 cm. below the surface — consisted of several irregular slabs. The grave was 1.7 m. in length, 1.1 m. in breadth, 1.45 m. in depth. The grave was filled with soil and contained one small vessel (a), standing 24 cm. from the N. W. end, 83 cm. below the roof, and also one small stone-celt (b) close to the N. E. wall, 90 cm. below the roof. In the soil a few fragments of broken pottery were found scattered about.

a. (Pl. 6, Fig. 1). Asymmetrical vessel, possibly an imitation of a bird. The handle has, on the outside, a few parallel incisions, the body itself being decorated with some clumsily drawn parallel, vertical streaks of red color which now, however, are almost obliterated. The whole

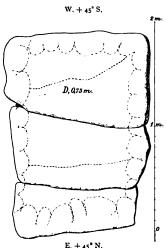


Fig. 18. Grave 6.

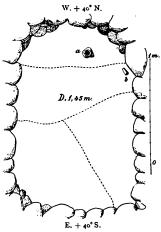
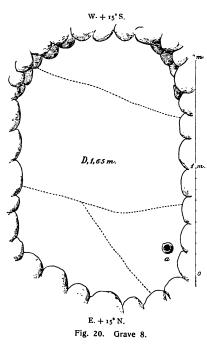


Fig. 19. Interior of Grave 7.

vessel covered with soot. It was filled with soil showing traces of charcoal. Height 9 cm., length about 12 cm., diam. 9.7 cm., diam. of aperture 4.5 cm.

b. (Pl. 6, Fig. 2). Celt of greenstone, smoothly polished; section almost elliptical. Length 7.5 cm., breadth 3.7 cm.



Grave 8. (Fig. 20).

Oblong bordering of stones, protruding 12 cm. above the platform. Length 2.8 m., breadth 2.1 m. Roof of large slabs was met with some 50 cm. below the surface. Length of grave 2.4 m., depth 1.65 m., breadth 1.5 m. The grave was filled with loose soil. In the N. E. corner near the N. wall, 1.2 m. below the roof, a small vessel was found. In the soil, thrown up from the bottom, a few meal-like traces of bone were discovered.

a. (Pl. 6, Fig. 3), Wide-mouthed vessel, ornamented with an elevated cord around the shoulder of the body, and a small degenerate animal head on each side. It is of thin, well-burned ware, of a pale yellowish color. Outside sooty. Height 7 cm., diam. 10 cm.

# Group III.

This group was situated deeper in the forest, on what was almost an island in the swamp. Height of the platform about half a metre, diam. about 10 m. The sloping sides were formed by a layer of oval, flat, water-worn stones. The platform contained five oblong stone borderings, marking graves as usual.

Grave 9. (Fig. 22).

Oblong bordering of stones, about 15 cm. high. Length 2.4 m., breadth at S. W. end 1.3 m., at N. E. end 1 m. The roof was composed of large slabs. The grave was 2 m. in length, 1 m. in breadth at S. W. end; 0.35 m. at the N. E. end; 1 m. in depth. It was filled with loose soil to 10 cm. distance from the roof. It contained one bowl (a) standing in the S. corner, 77 cm. below the roof, 7 cm. from the wall, also a small whistle (b) 42 cm. from the S. W. end, 65 cm. below the roof.

a. (Pl. 6, Fig. 5). Jar with hemispherical bottom, the upper part of the body rising angularly in two sections of which the lower is occupied by two

opposing panels, limited by very roughly modelled cords and containing in the middle a grotesque frog-like relief figure, with limbs outstretched. Marks of

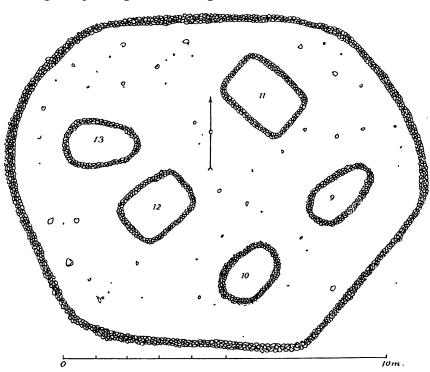


Fig. 21. Group III. Mercedes.

small handles remain. Filled with soil containing small pieces of charcoal. H. 7 cm., diam. 10 cm.

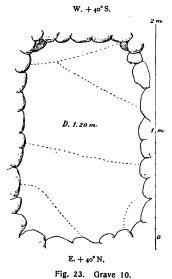
δ. (Pl. 6, Fig. 6). Whistle, in the shape of a small bird, with one large air-hole underneath the tail, and two small ones on the breast. The neck is perforated laterally for suspension. The sound produced is shrill. Length 4 cm., greatest breadth 3 cm.

Grave 10. (Fig. 23).

Oblong bordering of stones, protruding about 15 cm. above the platform. Length 2.15 m., breadth 1.5 m. Roof of the grave composed of large slabs.

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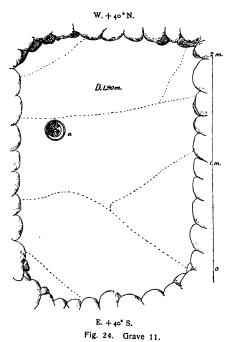
Length of grave 1.8 m., breadth 1.1 m., depth 1.2 m. The grave was almost filled with loose soil, containing a few scattered fragments of pottery, but nothing else.



Among the stones scattered on the surface near the western end of this grave, was found the remarkably well-executed stone head of a tapir or \*danta\*, (Pl. 7, Fig. 1). The search for the body was in vain, but it is very likely hidden among the numerous stone heaps in the neighborhood.

#### Grave 11. (Fig. 24).

Oblong bordering of stones protruding 6—8 cm. above the platform. Length 2.6 m., breadth 1.9 m. Roof of large slabs. Length of the grave 2.4 m., breadth 1.65 m., depth 1.9 m. The grave was filled with loose soil and contained one large bowl (a) at 30 cm. from the S. W. wall, 1.3 m. below the roof.



a. (Pl. 6, Fig. 4, a, b). Large, shallow, tripod bowl, painted yellow, with red ornaments, showing two conventionalized birds (?) surrounded by two encircling bands. H. 12 cm., diam. 20 cm.

#### Grave 12. (Fig. 25).

Stone bordering, 15 cm. high. Length 2.3 m., breadth 1.8 m. Roof of slabs. The grave 2 m. long, 1.5 m. broad, 1,9 m. deep, filled with soil to 10 cm. from the roof; it contained one small bowl (a) standing 15 cm. from the S. E. wall, 1.2 m. below the roof, and another similar vessel (b) 30 cm. from the same wall, 1.3 m. below the roof.

a. (Pl. 6, Fig. 7). Small tripod vase, painted red, with two handles (animal

figures) uniting the edge of the rim with the shoulder of the vessel. Height 8.5 cm., diam. 12 cm.

b. (Pl. 6, Fig. 8). Small, globular vessel of red color, stained with soot. Height 6.5 cm., diam. 6.5 cm.

#### Grave 13. (Fig. 26).

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Stone bordering on the surface 10-20 cm. high. Length 2.4 m., breadth about 1.5 m. Grave roofed, 2.3 m. long, 1 m. broad, 1.05 m. deep. Contained a small broken pot (a) standing close to the N. wall, 0.42 m. below the roof.

a. Badly damaged, hemispherical vessel with two cloven vertical handles. Color yellowish-red with reddish-brown patches on the shoulders. Height 9 cm.

#### Group IV. (Fig. 27).

This almost circular platform was situated in the forest, only 100 m. from the large mound. It contained four graves, three of which (15—17) had been previously opened and ransacked. Height of the platform about half a metre, diam. about 9 m. A bordering of stones, similar to those of the previous groups, surrounded this platform.

#### Grave 14. (Fig. 28).

Stone bordering on the surface about 12 cm. high. Length 1.9 m., breadth at S. W. end 1.15 m., at N. E. end o.8 m. Roof of slabs as usual. Length of grave 2 m., breadth 1.10 m. at the N. E. end, 0.75 m. at the S. W., depth 1,35 m. Filled with loose soil containing a few small potsherds.

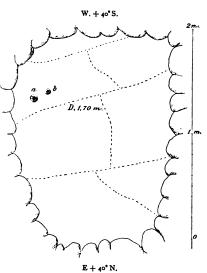
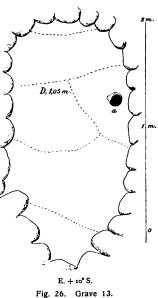


Fig. 25. Grave 12.

W + 10° N.



During the excavations of the graves a number of smaller objects of stone and clay, also fragments of a similar kind, were found scattered in the soil of the platforms and their neighborhood. Of these the following are reproduced in the illustrations.

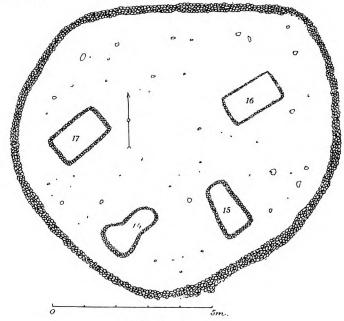


Fig. 27. Group IV, Mercedes.

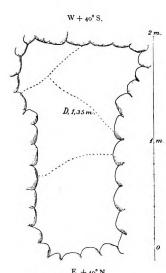


Fig. 28. Interior of grave 14.

- a. Celt of greenstone, 7.5 cm. long (Pl. 7. Fig. 3).
- b. Circular clay disc (Pl. 7, Fig. 2) with an incised cross on one side. Diam. 5 cm.

# Summary.

All the graves opened at Mercedes were constructed in one and the same way. The walls were built very durably, being still in perfect condition when not disturbed by the roots of large trees. The slabs, which formed the roof and bottom, were of limestone and, as a rule, large and heavy, some having formed burdens for several men. They were often chipped from the middle becoming thinner towards the sides.

Only in one grave traces of bone were found, but too moulded to admit of determination. The layer of darker soil, nearer the bottom, seemed to prove

that the body or bodies had been placed there. In some graves this soil contained charcoal and soot, but no traces of burned bones to prove that burning of the dead had taken place.

Most of the graves, as we have seen, contained vessels of clay, or other objects deposited therein. The majority of these vessels show signs of wear and are covered with soot, proving that they were employed as cooking utensils. Others look quite fresh and have probably served other purposes in the household.

As no skeletons were found here, it was of course impossible to ascertain the position of the objects with respect to the bodies. The vessels found were met with at varying depths, most of them about half-way from the bottom, but some close to it. They were placed in different parts of the grave but, as a rule, nearer to the end turning towards the centre of the platform. To judge from analogy, the heads of the corpses were placed at this end. The excavations of the graves of the same people (Guëtares) afterwards carried out in the highlands proved that, as a rule, the deposited objects were placed near the head, chest, or arms.

All the objects found in the graves (with the exception of the charred fragments of corn and corn-cobs) were of durable material. Besides the vessels of clay, two stone-celts were met with and a bead of blue glass.

This latter was the only object of European manufacture found. It proves that the builders of the graves were still living here, and thus burying their dead after the advent of the white man; this as late as in the 16:th century.

Very likely the low platforms containing the graves were originally foundations for the huts of the living; the custom of burying their dead inside the houses having prevailed in many parts of these regions.

Even nowadays this method of disposing of the dead is practised among people of a certain tribe in regions within the territory of Costa Rica, not so far off from the parts here described by me.

In the Costa Rican Gazette »La Union Catholica» of San José, Padre P. D. CARMONA who, in the capacity of secretary, accompanied Bishop B. A. THIEL on his mission to the *Guatusos*, has given an account of the present state of this tribe. He describes one of their communal houses, *Tojifo*, as quadrangular, each side measuring 17 'varas' 1, and in this house he found 26 men, 12 women, 9 children living, and there were 25 sepulchres; the house *Napoleon* was 30 'varas' long, 20 broad containing 8 men, 5 women, 3 children and 36 sepulchres;

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<sup>1</sup> I vara = 84 cm.

the house *Margarita* was 43 'varas' long, 23 broad, housing 24 men, 13 women, 17 children, and containing 60 sepulchres; the house *Congo* was the home of 10 men, 3 women, 3 children, and contained 9 sepulchres.

In the well-known work of Fray Bartolome de Las Casas, "Historia de las Indias", lib. II, cap. XXI reproductions are given from Christopher Columbus' journal of his fourth and last voyage, during which he discovered what is now called Costa Rica. This description contains detailed accounts of his first landing on the shores of Costa Rica and the encounter with aboriginals. In this important publication the following sentence contains interesting information about the burial methods of a village of the littoral: "The Admiral commanded that his brother, the Governor, should go ashore with some of the crew, to see the village and the manners and customs of the people of the place. There they found that inside the houses, which were of wood covered with cane, they had sepulchres in which were corpses, dried, with wide open eyes, and odorless, enveloped in blankets, or sheets of cotton. Above the sepulchres were boards upon which were cut the figures of animals, and, on some, the effigy of the person buried there; while with the dead were buried jewels, and articles which they considered most precious."

During the excavations on the highland plains, later on, I found at Orosi a great number of circular stone-enclosures, probably also hut-rings and some of these contained graves, others however did not.

#### III.

#### CACHE. MERCEDES.

In the forest, some 100 m. from the large mound, on the slope of a creek, the rains had swept away the humus and uncovered a small portion of the roof of a stone chamber, containing a lot of pottery, but no proofs that it had been used as a grave. In construction, this chamber (Fig. 29) differed in more

than one respect from the graves described above, the bottom consisting of a layer of oval, flat, waterworn stones, instead of slabs. It was also of less depth, being only 70 cm. deep. Its length was 1.4 m., the breadth 0.95 m. The interior, instead of being filled almost to the roof with black humus, contained to about two-thirds of its height only the subsoil of the place, yellow loam, mixed with gravel and stones of the size of a fist. Deposited in this bed, spread almost over the whole chamber, a great number of clay vessels, not less than sixteen in all, were found; some however badly broken. Intermingled with the soil were numerous pieces of broken pottery, including some of vessels not

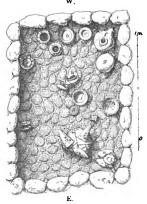


Fig. 29.

otherwise represented in the chamber. No sign of interment was found, neither was any charcoal to be seen. All search for any more similar cache-chambers in the neighborhood was in vain. No bordering of stones, or other sign above the ground, marked the position of the chamber described. The objects in this rich cache were all found pretty close to the bottom. Their position is best shown by the accompanying plan. The objects found were as follows:

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a. (Pl. 7, Fig. 7). Symmetrical, well-preserved tripod bowl of brownish-red color. The bottom is almost hemispherical; the upper part rises angularly. Two opposite sides of the vessel show panels formed by vertically placed, notched fillets of clay. The centre of one is occupied by the head and arms of a semihuman or simean figure in relief; the other shows a short tail. In the intervening spaces are two curved handles decorated with notches and rows of punctate markings. The flaring rim is 1.5 cm. broad with a notched edge. At the base of the rim, a double row of punctate markings encircles the neck. The legs are hollow, each containing a round ball of clay and having two longitudinal slots. Height 10 cm., diam. 14 cm.

b. Bowl, tripod, in shape almost similar to c, except as to legs being still



Fig. 30. Ornament on bowl b.

more conventionalized, having lost the protruding eyes and other traits, characteristic of a mammal's head. Color yellowish, with a brown band round the margin. The outside is almost entirely occupied by a broad zone, ornamented with the pattern Fig. 30, thrice repeated. Height 10.2 cm., diam. 16.2 cm.

c. (Pl. 8, Fig. 3). Bowl; shallow tripod of yellow color. The inside of the rim is covered with a conventionalized, painted design, almost effaced, but apparently resembling Fig. 31. Height 7.8 cm., diam. 11.5 cm.

d. (Pl. 8, Fig. 4). Globular vase, with almost upright rim and three high, slender, solid legs. Color reddish-brown. Above each leg there is a small roughly-shaped animal head, the intervals being each adorned with three vertical notched fillets. Height of vessel 12.5 cm., diam. 11.5 cm.



Fig. 31. Ornament inside bowl e.

e. (Pl. 8, Fig. 2). Bowl similar to c, but somewhat larger. Inside the rim a highly conventionalized red pattern (Fig. 31), showing three degenerate birds' heads with what is probably the rudiment of a wing or tail, each separated by two parallel, vertical lines. Height of vessel 9.2 cm., diam. 13.5 cm. - (Cf. Pl. 6, Fig. 4).

f. (Pl. 8, Fig. 1 and Pl. 9, Fig. 1). Globular, tripod vessel of whitish-yellow color, with narrow neck, adorned on one side with a mammal's head with flat, triangular nose. Another almost similar head protrudes

from the opposite side of the vessel. The body is ornamented with a horizontal,

broad, red band; similar bands traverse the shoulders. The legs small, conical, and solid. Height 20 cm., diam. 21.3 cm., diam. of orifice 6 cm.

- g. (Pl. 9, Fig. 2). Large egg-shaped, bright reddish-brown vessel with a small orifice, and flaring rim. Height of vessel 22 cm., diam. 17.6 cm., diam. of orifice 5.7 cm.
- h. Vessel-stand, or annular base of clay, resembling l, for vessel with conical base; badly broken, only fragments. This stand is of yellow color with a few red streaks irregularly placed. Around the outside of the upper rim there is a row of degenerate animal heads in relief.
- i. Vessel-stand, resembling the former, but somewhat larger; broken into fragments. Height 7.2 cm.
- j. Broken, shallow, tripod bowl, resembling e. Color yellow. Height 10.3 cm., diam. 15.5 cm.
- k. (Pl. 7, Fig. 8). Shallow, tripod bowl with rounded, hemispherical body. Color yellow. The bottom ornamented with three conventionalized birds' heads, painted in red color (Fig. 32). Height 10.2 cm., diam. 15.3 cm. (Cf. Fig. 31).
- l. (Pl. 7, Fig. 5). Vessel-stand of clay; around the upper rim a row of degenerate animal heads in relief and a roughly modelled cord around the neck. Height 9.7 cm., diam. 21 cm.



Fig. 32. Ornament inside bowl k.

- m. Large, simple tripod. Of the body only fragments are left, which have lost their color. Each well-preserved conical leg (Pl. 8, Fig. 5) represents a human face with eyes and mouth formed by circular holes, and containing the usual rattling clay ball. Height of the legs 18.5 cm.
- n. Large vessel with globular body; broken into small fragments: it was not possible to reconstruct it.
  - o. A lump of clay.
- $\rlap/p$ . (Pl. 7, Fig. 6). Circular disc of burnt clay. Diam. 8.5 cm. (Pl. 7. Fig. 2).  $^1$

<sup>&</sup>lt;sup>1</sup> During my stay later on among the *Pipiles* of Salvador, I found similar discs of various sizes, obtained from pieces of pottery, usually of the »comal», used as playthings. The children fastened with bees' wax a small bunch

The practise of secreting household articles as well as food in pits or in caves etc. has from early days been observed among widely disseminated tribes of North America. In Mexico the Tarahumares, who as a rule change their homes with the seasons, select small caves often in the most inaccessible places of the \*barrancas\* or \*cañons\*. And in these recesses they store provisions, mostly corn, apples, or the large clay-vessels not needed on excursions or during temporary change of abode. The caves are then often closed up by stones cemented together.

In the United States as is well-known the term \*cache\* is also used by the archæologists to denote those often very rich deposits of the raw material for or partly finished stone implements left by quarry-workers or traders.

In most countries the existence of similar \*depôts\* or \*caches\* must be taken into account, although many a time it will be difficult or impossible to decide when they were made for only practical temporary purposes as those mentioned, or as offerings of one kind or another.

of feathers, as a rule of a rooster, on the centre of a similar disc and then threw it up in the air. They called this toy "huilot" (pigeon, bird) or "gallito" (little rooster).

Clay discs of the same kind have been found in the United States also. In the 13.th Annual Report of the Bureau of Ethnol. in the article »Stone-Art» by George Fowke, the following information is found: »From south-eastern Tennessee and northwestern Georgia there are many fragments of pottery, small, thin and coarse, with the edges chipped and from northeastern Kentucky there are similar pieces, except that they have been fashioned from fragments of limestone and sandstone».

Amongst the Pipiles I also obtained thin, stone-discs (of slate) used in a throwing game — exactly the same I had before seen practised by the *Tepchuanes* of Chihuahua, Mexico, under the name of »tutuśvigai hólisi» or »juego del quatro». The aim in this game is to be the first of the party to get the set, numbering 4 stones, thrown from a certain distance into a small circular pit in the ground. The stone discs used by the Tepchuanes and their neighbors the *Tarahumares* for the purpose are however much thicker and heavier than those of the Pipiles. Amongst the latter people this game nowadays is seldom if ever played. Only one old man in Comapa told me that this game, when he was a youth, was much esteemed in this town and he presented me with a set of stone discs.

# IV.

#### STONE-CUTTERS' WORKING PLACE. MERCEDES.

hile opening paths in the forest during the search for graves, I found one day in a thick dark jungle an oblong stone, protruding about 0.5 m. from the ground. It seemed possible that this stone had been raised by human hands. Examining it more closely, I noticed under the fine, green moss traces of spiral engravings on one side. Returning with a couple of men with tools, we cleared off the underbrush and creepers from a piece of ground, and began to open a trench. We found the whole ground almost filled with discarded figures, human and animal, as well as broken limbs of stone, and great quantities of chips of all sizes. It was an ancient place for the making of stone-gods that I had come across by mere accident. Over a surface of some 20 square metres and to the depth of about I metre the soil was intermingled with chips and partly finished idols. The photo, reproduced on Pl. 10, was taken after the finds had all been exhumed.

The following were added to the collection.

- a. Male figure (Pl. 11, Fig. 2), in squatting position, with arms crossed and elbows resting on the knees. The head closely resembles that of a bear, the forehead being very low; the ears are large and placed far back; the eyes oval; nose broad, even at the base. Height 56 cm., breadth across the shoulders 28 cm.
- b. Male figure (Pl. 11, Fig. 3), resembling the former as to position, holding an oblong object with both hands to his mouth. Height 56 cm., breadth across the shoulders 30 cm. The head, perhaps not quite finished, shows smaller

ears than those of the former figure. The form of the object held to the mouth cannot be clearly distinguished, but is probably a musical instrument, a flute of some kind. Excavations made at a later date in the highlands, in the territories of the same *Guëtares*, brought to light a number of small stone-idols of the same shape as this one, all apparently blowing flutes. The extensive collections in the San José museum, and Troyos' private museum in Cartago, also show an astonishing number of representations of this squatting, flute-blowing god. No other god is here so often represented in stone as this. But this specimen from the workshop is by far the largest hitherto found. Several representations in clay of this popular god are seen in relief on vessels from the graves on the highland plains. Head and arms of these latter figures have often a simean appearance.

- c. Male figure (Pl. 12, Fig. 2), with legs drawn up and both hands pressed against the mouth, probably clasping a flute. This piece, sculptured out of a flat, rather thin stone, is apparently unfinished, as if the artist had been interrupted in his work. There is no split in the stone, nor any chip broken in a wrong place that might have caused the rejection of the figure. Height 68 cm., breadth at the shoulders 40 cm., thickness of the stone about 19 cm.
- d. Male figure (Pl. 12, Fig. 3). This very clumsy figure was probably rejected owing to a fatal split in the face. On being transported through the forest, several more fragments scaled off. Height 65 cm., breadth across the chest 33 cm.
- e. Human head (Pl. 11, Fig. 1), placed in vertical position on a clumsy, roughly cut, oblong boulder. It was separated from the trunk which proved too heavy for transport. Length of head 35 cm., width of face 26 cm.
- f. Human head (Pl. 12, Fig. 1), broken off. No trunk found at the place. The hair is dressed in a peculiar fashion. Badly damaged. Height of head 29 cm.
- g. Human head (Pl. 13, Fig. 3), small, broken off, well-executed. The hair is combed down and transversally cut in front. Height 9.3 cm.
  - h. Trunk of human body (Pl. 13, Fig. 1). Height 24 cm., breadth 22 cm.
- i. Arm embracing a small human head (Pl. 13, Fig. 2). Was broken off from a mutilated trunk. Length 17 cm.

- j. Human leg with foot (Pl. 13, Fig. 5). The ankle is adorned with a double anklet. Diam. at the ankle 9 cm.
  - k. Human leg with foot (Pl. 13, Fig. 4). Length 33 cm.
  - l. Human foot; instep marked (Pl. 14, Fig. 4). Length 11 cm.
  - m. Human foot; instep marked (Pl. 14, Fig. 5). Length 12 cm.
- n. Animal head, probably representing a puma (Pl. 14, Fig. 3). Length 18 cm.
- o. Broken part of an object of unknown shape (Pl. 13, Fig. 6). Height 14 cm.

Among the large, mutilated figures seen on Pl. 10, which were left on the spot, the headless trunk of an alligator (?) can be distinguished.

Single discarded figures or crude boulders with initiatory work are pretty often found. Everywhere in the museum-collections numerous clumsy and crude stone figures are met with, which have perhaps often been considered as proofs of the low state of culture and art of the people, instead of being — what they presumably often are — discarded and unfinished figures left by the sculptor. The comparatively large number discovered on this single spot, shows how often the ancient artist in stone found his material unsuitable, how easily some flake or chip was split at the stroke of the celt in the wrong place, and thus spoiled the work. The number of similar crude unfinished stone-idols scattered in the regions of ancient stone-art in America is, perhaps, very considerable.

No celt or other tool was found among the stone-refuse in this place, but lack of time, in consequence of the heavy rains, hindered me from making any thorough search among the heaps of chips and earth thrown up.

In another part of the forest, in the neighborhood of the graves, I found standing quite alone and two-thirds sunk in the black humus, the splendid, large cylindrical \*seat\* seen on Pl. 14, Fig. 1. It measures 62 cm. in diam. at the top and 33 cm. in height. Near the upper rim there runs a circular band; below that a row of 23 small animal heads. The purpose of this object is unknown. It shows no wear, or signs of grinding on the upper surface.

Close to the house at Mercedes another similar but smaller »seat» (Pl. 14, Fig. 2), which had been found near the large mound, was standing. It was

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used as a support for a large piece of sandstone, on which the peons of the hacienda used to sharpen their machetes. This stone was, however, now partly broken and was left in its place. It measured 42 cm. in diam. at the top, 30 cm. in height, being ornamented with 19 small animal heads. Only three stones of this peculiar shape have I seen. The third, probably also obtained from this place, now belongs to the National Museum of Washington.

#### V.

# CLAY-PIT AT MERCEDES.

hile working at the great mound one of the natives informed me that once, when hunting on the hills above, he had met with a large pit dug by human hands, \*Goldmines perhaps\*, he suggested. I accompanied him to the spot about half a mile up the river. The ground in this dense forest, consisted of red clay and was almost bare. No humus nor any herbaceous vegetation was seen, only a layer of dead leaves spread over spots of the sterile soil. Here, on the almost flat top of a forest-clad hill, a pit had been sunk in the ground, about 10 m. deep and some 25 m. in diameter. It was evidently the work of man. Potsherds, too, were found in this same pit. In the neighborhood, nevertheless, no sign of any settlement nor other remains could be found.

Undoubtedly the Indians of the ancient settlements below had obtained from this place their supply of clay for »sochete» — to use the adopted Aztec word in vogue in Costa Rica — for the plaster which covers the pallisade work of their walls.

While excavating in the vicinity of the large mound, in several places I found samples of similar \*sochete\*, which had been burnt and now preserved the impressions of the poles of the pallisade wall. Pl. 15, Fig. 5 represents a fragment of similar plaster.

# VI.

# OBSERVATIONS DURING VISITS TO VARIOUS PLACES.

Before leaving the East Coast I visited every station on the road, in order to obtain information about all the ancient remains noticed by the people living at the haciendas.

Near Columbiana Station, at the hacienda of WILLIAMSBURG, the remains of an extensive, ancient settlement is crossed by the railway. The ground at this place is comparatively high and open, at present consisting of wide green pasture lands and banana plantations. Close by, in full view of the railroad, groups of small enclosures of stone, almost circular, varying to quadrangular similar to those at Mercedes - are scattered over several acres of the green slopes along the river. Some irregular pits had recently been dug in some of the enclosures, and stone slabs and soil (red clay) had been thrown up. The treasureseekers had, however, been disappointed, only a few small, broken pots had been found. In the heaps of soil and on the surrounding ground, I picked up quite a number of potsherds, plain, of red, yellow, brown, or black color, also a number with painted designs, as well as others engraved or with designs in relief. A few crude stone implements and one grinding stone were also added to the collection. All these objects and fragments show the same types and same ornaments as those observed at Mercedes. In consequence of the absence of the owner, I never had any opportunity of starting excavations at this place, as had been my intention.

On the opposite bank of the river, in an open meadow, close to the forest, there was a large, almost square enclosure, formed by four flat walls, about 9—11 m. long, 3 m. broad and 1 m. high, built of oval, flat water-worn stones (Fig. 33).

In the river below there was a large oblong boulder, which had been fashioned by the ancients into something of human shape. A photo of the stone, taken some years ago by a photographer of San José, is given below (Pl. 15, Fig. 1). At the time of my visit this boulder was lying in some depth of water, and I could not get at it to examine it. I ascertained, however, that it had been used for grinding, the flattened circular stomach, 42 cm. in diam.

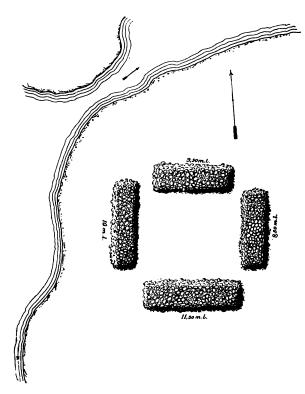


Fig. 33. Square stone enclosure at Williamsburg.

having served for the purpose. The head of the figure was broken off and missing. During my stay at Mercedes this stone was shipped to New Orleans by an American physician.

About 50 m. below this stone there were two large boulders in the river, marked with some crude pictographs (Pl. 15, Figs. 2, 3). Those on the boulder in Fig. 2 are with one exception fragmentary curves; the one completed figure has a length of 83 cm. The pictographs on the boulder in Fig. 3 are

more or less circular outlined figures with a number of dots. The whole in each case resembling possibly a human face.

At SIQUIRRES about a dozen graves were opened during my stay at Mercedes by a native Lorenzo Masís, who later on became my chief digger. I visited the place and found that the graves exactly resembled those at Mercedes. A few small broken pots and some stone celts had been found in the graves. Mr. Schäfer, an old German settler, owner of the extensive hacienda of Siquirres, told me that, some years before, he had opened a similar grave and found a very large stone ball. Later on, when excavating on the highland plains, I discovered several of these large stone balls in the ancient burial ground of Orosi.

At STA ROSA, one of the planters, an Austrian, had opened several graves when the ground was being prepared for banana culture. The description he gave me of these graves coincides with the character of the graves at Mercedes, with the exception that, in a few cases, a second grave or story had been found under the bottom slabs. A few small pots had also been found.

On the northern side of the Mercedes Station I visited

GUASIMO. An English roadmaster, who had resided there for many years, showed me a spot where the railway had crossed a small place of sepulture. A number of small clay vessels of various shapes had been found in these graves. He still kept two of them (Pl. 9, Figs. 5, 6) and presented them to me. The graves were all of the construction formerly described.

JIMENEZ. In the forest, about two hours' walk from the station, numerous graves had been met with. In one spot four large graves were placed in a huge, almost circular, truncated mound, about 4 m. high. Near it, mutilated stone-idols in human shape were still lying on the ground. Other similar mounds were seen that had not been opened. Time, however, did not allow of my beginning any excavations there.

Later on, in Cartago and San José, I had the opportunity of consulting several pioneers, who had passed several years in various places along the East Coast. Among these was a German, a Civil Engineer, C. Schurz, who had spent half his life in these regions and, as the head of Government surveys and expeditions, had enjoyed opportunities of seeing more of these virgin forests than any other man in the Republic. He told me he had never met with any \*ruins\* in the Costa

Rican forests. The only ancient remains he had seen were burial grounds and a few mounds; but nowhere had he come across mounds or remains of a size to compare with those I had selected at Mercedes for my first excavation. These were the most important known on the Atlantic Coast. At several points along the river banks Mr. Schurz had met with ancient burial grounds, and he had always found the sepulchres constructed in the same manner as those described above. Only in one single place, close to a burial ground, had he found a large stone-idol standing in the forest.

B.

# RESEARCHES ON THE HIGHLAND PLAINS

IN

THE PROVINCE OF CARTAGO.

In the month of July the rains made continued work on the Atlantic lowlands almost impossible, so I ascended to the highland valleys of the interior, where the dry season still prevailed. The excavations and researches I carried on in these regions lasted until the following April.

The highland plains appeared in several respects more inviting as a field for archæological research. Instead of impenetrable dark tropical forests, the extensive valleys present open green meadows and cultivated ground. Roads run in all directions. A numerous population of coffee-planters and agriculturists makes it comparatively easy to obtain labourers. The heat is, of course, less oppressive and the rainfall, as previously stated, is considerably less.

Before my arrival at Costa Rica I had been informed that the burial grounds richest in finds in the Republic had, as a rule, been hitherto found on the highland plains. Apparently the fertile grass-lands of the interior were in earlier times, as well as now, the most densely populated.

After visits to San José and Cartago, the present and the former capitals of the Republic, I selected the valley of Cartago as the most promising field for my researches. Most of the collections of archæological objects to be seen in the National Museum in San José and in the Troyo collection in Cartago were obtained from various localities in the province of Cartago.

It was only after the railroad was begun, in the seventies, that any attention was paid to the rich treasures of ancient art buried in these regions. The late Friedr. Lahmann, German consul, seems to have been the first to gather together any collection of antiquities. He informed me that he had obtained most of the objects from the labourers employed in building the railroad, ancient burial grounds having been occasionally met with during the progress of that work. He also bought a great number from farmers in various parts of the

interior, and at Nicoya on the Pacific coast. The collection, numbering more than 1000 objects, was sold to Bremen for 10,000 Marks, and in the year 1879 was presented by some generous citizens to the museum of that town. Parts of the collection are described by Mr. Strebel of Hamburg and Prof. Fischer 1). Another similar collection was soon after formed by another German, J. Carmigol of San José, and sold by him to Washington, as stated by Dr. H. Polakowsky 2).

At about the same time as the previously mentioned collections were being made, one of the wealthiest native merchants and landowners of Costa Rica, Sr. D. Juan R. Troyo of Cartago, began a third collection, which soon became a very valuable one, and grew to such importance that even the attention of Prof. A. Bastian of Berlin was drawn to it.

From a letter from Sr. Troyo to Dr. Polakowsky<sup>2</sup>) about the proposed sale of the collection to Berlin, the following extract may be given:

The majority of the objects have been found in a coffee plantation at Agua Caliente, a village about a mile and a half from Cartago. The cemetery of Purapura, the capital of the province of Huarco, was formerly situated here — — My collection includes about 3000 objects of clay, 400 of stone and 140 of gold.

It had taken Sr. Troyo many years to accumulate his collection of antiquities. Most of the objects were dug up on his own ground, either at the cemetery above-mentioned or at Turrialba. Numerous purchases were, however, also made by him. From various places in the Cartago valley and its vicinity the country folk brought similar objects to him, things which had previously commanded no pecuniary value. When I was at Tucurrique and Santiago I came across men who had begun to excavate graves, in want of other remunerative work, so as to obtain vessels of clay to sell to Sr. Troyo. Dr. H. Pittier mentions in his »Viaje de Exploracion al Rio Grande de Terraba», p. 72³), that even at such a distant spot as »El General», on the grass plains near the confluence of the rivers Chirripó and Buena Vista, the population had stated that part of the find from a large burial ground there, now devastated, had been sold to Sr. Troyo. From the peninsula of Nicoya, where other phases of civilization with objects of a different kind existed, he procured many important specimens. No notes having been made as to where the objects were found, this interesting collection naturally

STREBEL, HERMANN. Bericht über die Sammlung Alterthümer aus Costarica im Bremer Museum. — Abh. v. naturw. Vereine zu Bremen, VIII, 1883, p. 233—253.
 FISCHER, H. Bericht über eine Anzahl Steinsculpturen aus Costarica. — Abh. v. naturw. Vereine zu Bremen, VII, 1881, p. 152—175.

<sup>&</sup>lt;sup>2</sup>) POLAKOWSKY, H. Altertümer aus Costa-Rica. — Festschr. zur Jubelseier d. 25-jähr. Bestehens des Vereins i. Erdkunde zu Dresden. 1888, p. 203—214.

<sup>3)</sup> Annales del Instituto ficico-geografico y del Museo Nacional de Costa Rica. III. 1890, San José 1892.

suffers in value. By far the greater number were obtained from Sr. Trovo's own estate. They were dug up by Lorenzo Masís, a very energetic and industrious man in his employ. Along with some other peons, Masís was for years almost exclusively occupied in searching the innumerable graves which had been met with while the soil was being prepared for the cultivation of coffee. All gravefinds which were considered valuable enough to be included in the collection, were preserved.

In 1887 Sr. Trovo died, bequeathing his collections to the National Museum 1) of San José, founded that same year.

Since the demise of Sr. Troyo, his widow, Sra. D. Dolores Troyo, has continued collecting the antiquities come upon in the enormous burial ground at Agua Caliente, now almost entirely exhausted. This work also has been for the most part executed by Lorenzo Masís. Sra. Troyo's new collection, which of itself forms a complete museum, contains more than 4000 objects.

The year before I reached Costa Rica, Lorenzo Masís, together with about a dozen workmen, was engaged for about six months by Mr. Guido v. Schroeter to explore a very large and unusually rich burial ground •Las Huacas», on the slopes of Mt. Irazu. The large collection of about 1200 objects obtained there I had the opportunity of seeing at San José, before it was despatched to the Ethnographical Museum in Vienna, for which it had been purchased.

During the two decades previous to the time of my stay in Costa Rica some smaller collections were also obtained from the Cartago valley. Lorenzo Masís has almost constantly been occupied in looking out for graves, selling the finds he has made to amateur collectors.

In his annual report for 18982) the director of the National Museum in San José gives the following information as to where the archæological objects in the institution were found:

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<sup>1)</sup> As early as 1862 Sr. D. M. Francisco Iglesias attempted to establish this Museum, but it was not until under the presidency of Bernhardo Soto that it was actually started. Sr. D. Anastasio Alfaro was appointed director. In the year 1898 he was succeeded by Dr. Juan Ferraz, who began the work of reorganizing the institution. The museum has been considerably enriched from time to time by the purchase of collections from various parts of the Republic, and now contains more than 10,000 archæological objects.

<sup>2)</sup> JUAN F. FERRAZ. »Informe del Segundo Semestre y fin de año econ. 1898-1899». San José.

The report for the following year 1) notes the addition, besides a few smaller lots, of not less than 1741 objects, forming the La Croix collection, obtained at the following localities in the province of Cartago: La Chinchilla, Angelina, San Raphael and Palmichal.

Consequently, the objects in the Museum of San José have been principally gathered from two centres, viz. from the province of Cartago on the highland plains and from the province of Guanacaste on the Pacific side. In the former province the surroundings of the pueblo of Cartago, and in the latter the neighbourhood of the pueblo of Nicoya, have yielded the richest tributes.

The Atlantic slope or coast has yielded only 10 objects, all from the province of Santa Clara.

The Cartago valley seemed, when I arrived, to be almost cleared of antiquities, and the prospects of finding any burial place as yet undisturbed in these parts were at first far from bright. It was only after very diligent inquiries among the inhabitants of various places that I at last succeeded in my search.

With a couple of natives as guides, I first of all visited most of the localities in the Cartago valley celebrated for their antiquities; these are situated for the most part on the S.W. slopes of Mt. Irazu. In the course of my search I came to several villages and haciendas, e. g.: Cot, Tierra Blanca, Potrero Cerrado, Tarras, El País, Paraíso, Navarro, and the excavated burial ground >Las Huacas>, already mentioned. Everywhere, however, I found that my proposed work was precluded, either owing to the cultivation of the soil, or else to the plundering of the graves. In many places I saw numerous fragments of limestone slabs, either in the modern stone walls round the fields, or on the heaps of stones which were frequently to be found dotting the cultivated ground, or scattered about the fields. Potsherds were also plentiful, chiefly of a yellow or red colour.

As I could not succeed in finding any promising field of labour in the vicinity of Cartago, I determined to try some more distant spot along the line. One of the friends I made in Cartago advised me to try what could be done in the neighbourhood of the Santiago Station, a couple of hours by rail E. of Cartago.

<sup>1)</sup> JUAN F. FERRAZ. »Informe del año econ. de 1899 à 1900». San José.

#### GRAVES AT SANTIAGO.

n the vicinity of the Santiago Station there are many large coffee plantations, and while preparing the soil, the planters had discovered antiquities in several places. On visiting these spots, I found plenty of small red and yellow potsherds in several places where the soil was exposed. I could not discover any graves in the plantations, but at about half an hour's walk from the station, on an open grass plateau above the Reventazon River, the natives showed me some stone circles and an elliptical mound of earth. These ancient remains - within the boundary of a small hacienda called Las Mesas — lay along, and quite close to, the steep bank of the river, which here flows some hundred feet below. Two of the stone circles were measured, one being about seven, and the other about ten, metres in diameter. The stones forming the circles were generally round, more or less regular in form, and most of them were 10 to 30 cm. in diameter. The ground within the circles was on the same level as that in the surrounding meadow. Everywhere inside the circles we probed the ground to a considerable depth with a long slender steel rod specially designed for the purpose. In order to find out the character of the ground the plan was adopted of digging a number of pits, each about 1 metre in diameter and of about the same depth, in a straight line across the area of the circles, the pits being about 4 feet apart. Almost immediately under the turf we came upon hard reddish yellow clay. In the upper layer of this clay, down to a depth of about 30 cm., we now and again met with potsherds. Among these there were some very crude flat pieces of a greyish yellow colour, apparently fragments of unusually large vessels, possibly ollas for >chicha>. A few other small objects of clay and stone were also met with here, viz.: a, a crude human figure of stone, only 4.1 cm. high; b, a celt of greenstone, flattened and resembling Pl. 7, Fig. 3, 5.8 cm. in length; c, d, e, and f, polishingstones of various shapes; g, a handle of a clay spoon in the shape of a bird's head (Fig. 34); h, a fragment of a clay spoon with handle, the latter in the

8

Fig. 34. — (1/2). (Cat. No 1900. 3. — 6.83).



Fig. 35. —  $\binom{1}{2}$ . (Cat. No 1900. 3. — 6.82).



Fig. 36. —  $\binom{1}{1}$ . (Cat. No 1900, 3. — 6.84).

shape of a small human figure with one leg missing (Fig. 35); i, a handle of a clay spoon in the shape of an animal's head (Fig. 36); j, a bowl, diminutive, legs missing, height 4 cm. (Fig. 37); k, a bowl, diminutive, globular (resembling Pl. 6, Fig. 8), 4.5 cm. high, 5.4 cm. in diam., painted red.

Besides those objects I found several legs of vessels of earthenware and a couple of ornaments in relief, broken off. No trace of any grave was discovered within the circles; I assumed the circles to be \*hut-rings\*.

Finally I turned my attention to a somewhat flat mound of elliptical shape (see the plan, Fig. 38), not far from the circles. Its centre was about 1'/2 metres above the surrounding ground. The mound was overgrown with coarse grass, of the height of a man, and with small bushes. Stones appeared above the ground in the very centre, and at one or two other points.

On digging a hole near the eastern end, at a depth of about 1.5 m., we came across the roof of a cist. The turf of the mound was therefore removed, and immediately under it we found hard, compact yellow clay. All the soil was

removed, and several cists — twelve in all — were exposed. Almost the entire western half of the mound was filled up with graves of a different construction, viz. grave-pits more or less regularly oval or circular at the mouth, the bottom being rounded. Both walls and bottom were covered with a layer of cobble-stones. In the soil above these graves we also came across similar stones, which did not, however, form a continuous roof or layer. These latter graves were met with at about the same level as the cists formerly mentioned, i. e. at 1½ to 2 metres below the surface of the mound. A schematic section of a stone-cist and a grave-pit is shown in

 $_{\text{Cat. No. 1900. 3.}}^{\text{Fig. 37.}} - (\frac{1}{1})$ . A schematic section of a stone-cist and a grave-pit is shown in Fig. 39. — The graves at the eastern end, on the other hand, were found in the apparently otherwise undisturbed hard yellow subsoil of clay. In the centre of the mound, again, we found black humus, freely interspersed

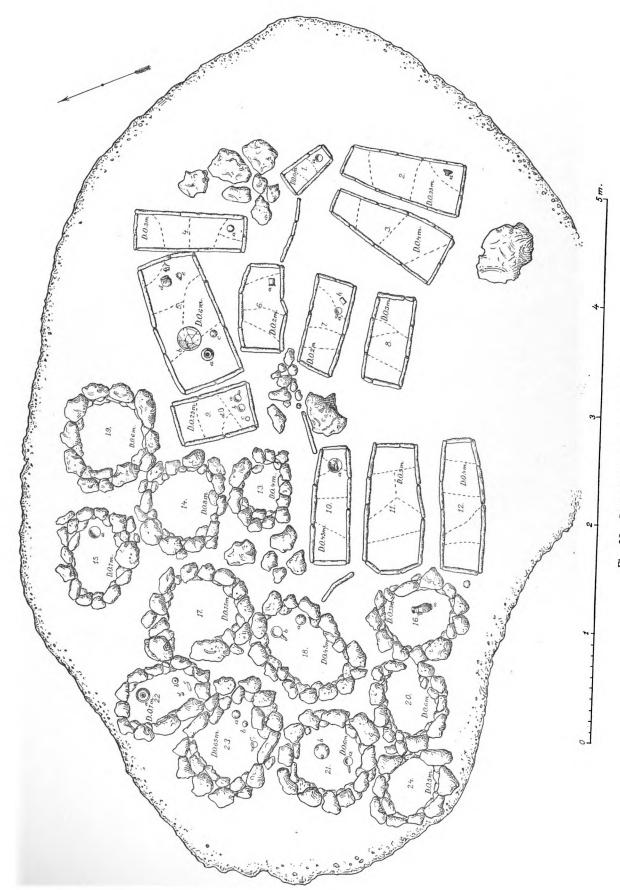


Fig. 38. Plan of graves in mound, Santiago.

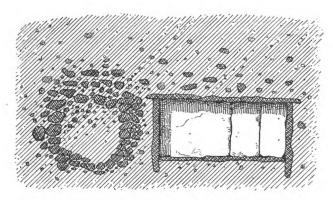


Fig. 39. Section showing a Stone-Cist and a Grave-Pit in the Mound.

with potsherds and fragments of charcoal. This layer extended from the centre across the greater part of the western half of the mound; it was of varying depth, at some places as much as two metres, in others much less.

The graves in the mound may be described as follows:

## A. STONE-CISTS.

Grave 1. Almost rectangular cist, with roof, sides and bottom composed of thin slabs of limestone 1). Length 0.45 m., breadth about 0.2 m., depth 0.15 m.



Fig. 40. — (1/2). (Cat. No. 1900. 3. — 6.1).

Direction W. + 75° N. — E. + 75° S. — The grave was filled with hard, sticky clay almost to the roof and contained near the S. end wall, 9 cm. below the roof:

a. (Fig. 40). Diminutive conical bowl with annular base. Colour red. Height 3.3 cm. Diam. 6.5 cm.

Grave 2. Almost rectangular cist of limestone slabs. Length 1.1 m., breadth

about 0.35 m., depth 0.35 m. Direction W. + 55° S. — E. + 55° N. — The grave was filled with hard clay; there were also a few scattered fragments of pottery. In the S. E. corner, 20 cm. below the roof, it contained:

a. (Fig. 41). Small simple bowl of the same shape and colour as that in Grave 1, but somewhat larger. Height 4.5 cm. Diam. 8.5 cm.



Fig. 41. —  $(^{1}/_{2})$ . (Cat. No. 1900. 3. — 6.2).

<sup>1)</sup> About the construction, lie etc. of these graves, see the resumé given below, p. 60.

Grave 3. Oblong cist of the same kind of slabs as in graves 1 and 2. Length 1.15 m., breadth about 0.35 m., depth 0.4 m. Direction W. + 40° S. — E. + 40° N. — Grave filled with clay, mixed with some black humus in patches, to about 5 cm. from roof. No other contents.

Grave 4. Rectangular cist. Length 1 m., breadth 0.3 m., depth 0.3 m. Direction W. + 70° S. — E. + 70° N. — The grave was almost filled with clay. Near the S. E. corner, 9 cm. below the roof, I found, turned upside down:

a. (Pl. 16, Fig. 1). Diminutive, shallow tripod bowl with simple, incised decorations. The small feet, although solid, have on the inner side a longitudinal incision, imitative of the usual slit on shallow feet. Colour reddish. Height 4 cm. Diam. 6.7 cm.

Grave 5. Almost rectangular cist. Length 1.25 m., breadth about 0.55 m., depth 0.6 m. Direction W. + 10° N. — E. + 10° S. — Towards the E. end of the grave three small vessels (f, d, e); close to the middle a larger one (b) and two small ones (a, c).

- a. Comparatively large, globular vessel with narrow, curved rim. Resembling Pl. 21, Fig. 14, but with rim more depressed. Colour yellowish red. Height 15 cm. Diam. 13.5 cm. Found 35 cm. below the roof, 18 cm. from the W. end wall.
- b. Large, open, shallow tripod bowl, broken, legs missing. Resembles Pl. 26, Fig. 4. The outer side of the wall shows, thrice repeated, the incised geometrical design of Fig. 42. Height of body 8.3 cm. Diam. 21.2 cm. Found standing 32 cm. from the W. end wall, 45 cm. below the roof.



Fig. 42. Incised Ornament on Bowl b,

Grave 5.

(Cat. No. 1900. 3. — 6.5).

c. Small bowl, tripod (resembling Pl. 20, Fig. 3), with two perforated ears on the shoulder, and on each side a narrow panel with an incised geometrical decoration (Fig. 43). Colour reddish brown. Height 6 cm. Diam. 8.5 cm. Found turned upside down, Fig. 43.



Fig. 43. Incised Ornament on Bowl c, Grave 5. (Cat. No. 1900. 3. — 6.6).

d. (Pl. 16, Fig. 2). Small globular bowl, somewhat damaged, with two small perforated ears (one missing) at the rim. On both sides five cord-like, vertical fillets, ending in tufts. Colour yellowish red. Height 7.2 cm. Diam. 8.2 cm. Deposited 40 cm. below the roof, about 15 cm. from the E. wall.



Fig. 44.  $- \binom{1}{2}$ . (Cat. No 1900. 3. - 6.3).

- e. (Fig. 44). Small spoon of clay with shallow circular bowl; the mutilated handle is adorned with something like a rudimentary head. Colour reddish brown. Length about 12 cm. Diam. 6.8 cm. Found lying close to the last object at about the same depth.
- f. Diminutive, shallow tripod bowl of about the same shape as Pl. 16, Fig. 1, but quite plain. Height 3.2 cm. Diam. 5.8 cm. Found close to, and at the same depth as, the two last-mentioned objects, near the E. wall.
- Grave 6. Almost rectangular cist. Length 0.8 m., breadth about 0.35 m., depth 0.2 m. Direction W. + 25° N. E. + 25° S. Filled with hard clay, containing patches of black humus and charcoal. In this grave, about 5 cm. below the roof and near the S. E. corner, I came across:
- a. (Pl. 16, Fig. 3). Diminutive cylindrical vase with three very small feet, apparently degenerate human heads. Vessel of yellow colour adorned with red vertical parallel streaks. Height 8.4 cm. Diam. 5 cm.
- Grave 7. Rectangular cist. Length 0.85 m., breadth about 0.3 m., depth 0.2 m. Direction W.  $+40^{\circ}$  N.  $-E. +40^{\circ}$  S. Filled with hard clay. This grave contained two small clay objects in the S. E. corner.
- a. Spoon with shallow circular bowl. Handle without any ornaments. Colour reddish brown. Length 11 cm. Diam. 6.4 cm. Found 12 cm. below the roof.
- b. (Pl. 16, Fig. 8). Diminutive vessel, almost cylindrical in form, with three small feet. Colour yellowish. Height 6 cm. Diam. 4.5 cm. Found 11 cm. below the roof, fairly close to the spoon, nearer than it to the S. W. corner.
- Grave 8. Rectangular cist. Length 0.8 m., breadth 0.3 m., depth 0.3 m. Direction W + 35° N. E. + 35° S. Filled with hard clay containing a few fragments of pottery.
- Grave 9. Rectangular cist. Length 0.7 m., breadth about 0.35 m., depth 0.25 m. Direction W. + 85° S. E. + 85° N. Filled with soil containing the following objects deposited near the S. end:
- a. (Pl. 16, Fig. 9). Small spoon with shallow circular bowl; handle resembling the head of a serpent (?). Colour yellowish. Length 10.8 cm. Found 10 cm. below the roof in S. E. corner.

- b. Diminutive shallow tripod bowl of almost exactly the same shape as b in Grave 5. Found turned upside down, 12 cm. below the roof, close to the S. wall. Length 10.8 cm.
- c. Diminutive cylindrical vessel (resembling Pl. 16, Fig. 3), broken into fragments. Legs missing. Height of body 2.8 cm. Diam. 3 cm. Found 20 cm. below the roof, close to the last vessel. Colour yellowish.
- d. Diminutive, flat, almost triangular celt of polished greenstone, resembling Pl. 25, Fig. 9, but more flattened; found on the very bottom in the S. W. corner. Length 4.7 cm., breadth at edge 2.6 cm., thickness 0.9 cm.
- Grave 10. Rectangular cist. Length 1.1 m., breadth about 0.35 m., depth 0.45 m. Direction W. + 30° N. E. + 30° S. Filled with soil. In the middle of the grave near the W. end, 10 cm. below the roof there were:
- a. (Pl. 16, Fig. 4). Bowl, hemispherical, wide open, on annular base. Adorned at intervals round the base of the rim with five small conical knobs—a sixth apparently missing from date of construction. Colour brownish. Height 5.5 cm. Diam. 11.5 cm.
- b. (Pl. 16, Fig. 5). Diminutive clay vessel, four-legged shallow bowl in the shape of a puma. Height 10 cm. Length 2.6 cm. Found standing inside the bowl a. Colour yellowish.
- Grave 11. Almost rectangular cist. Length 1.2 m., breadth about 0.45 m., depth 0.5 m. Direction W. + 30° N. E. + 30° S. Filled with soil.
- Grave 12. Almost rectangular cist. Length 1.2 m., breadth about 0.35 m., depth 0.4 m. Direction W. + 30° N. E. + 30° S. Filled with soil.

## B. GRAVE-PITS.

Grave 13. Almost circular grave-pit, found about 1 m. below the surface of the ground. The mouth was covered with an irregular pack of stones. The walls and the rounded bottom were lined with cobble-stones of various sizes and shapes. Diams. of the mouth of the pit 0.3 and 0.4 m., depth 0.4 m. — Filled with soil. Contained nothing else.

The following grave-pits were all constructed in the same way and were found at about the same depth as No. 13.

Grave 14. Diam. about 0.6 m., depth 0.8 m. — Filled with black soil, containing scattered pieces of pottery and some charcoal.

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Fig. 45. —  $(^{1}/_{3})$ . (Cat. No. 1900. 3. — 6.19).

Grave 15. Oblong grave-pit. Diams. 0.6 and 0.4 m., depth 0.7 m. Direction W. + 30° N. — E. + 30° S. — Filled with black soil. Contained near the S. E. end:

a. Hemispherical bowl on annular base (Fig. 45). Inner side and the upper half of the outside painted red. Height 6.3 cm. Diam. 11.8 cm.

Grave 16. Oblong grave-pit. Diams. 0.6 and 0.5 m., depth 0.55 m. — Filled with soil mixed with particles of charcoal. Lying almost in the centre of the grave was found:

a. (Pl. 17). Vase in the shape of a ewer, with handle representing a conventionalized animal with head turned right round. Painted with red, orange and black ornaments on cream-coloured ground, as seen on the plate. Height 37.1 cm. Diam. at the widest part of the body 16.5 cm., at the orifice 12.5 cm.

Grave 17. Oblong grave-pit. Diams. 0.6 and 0.45 m., depth 0.55 m. — Filled with black soil. Contained nothing else.

Grave 18. Oblong grave-pit. Diams. 0.8 and 0.4 m., depth about 0.4 m. Direction W.  $\pm 25^{\circ}$  S.  $\pm E. \pm 25^{\circ}$  N.  $\pm E.$  Filled with black soil. Contained:

a. Small, almost globular, tripod vessel of reddish brown colour. Resembling Pl. 28, Fig. 4, but destitute of ornaments and provided with three small feet. Found near the E. end, close to the S. side wall. Height 5.2 cm. Diam. 6.4 cm.



Fig. 46. Clay Spoon found in Grave 18. —  $(^1/_2)$ . (Cat. No. 1900. 3. — 6.35).

b. Clay spoon (Fig. 46) with circular shallow bowl; handle in the shape of an animal's head with long nose. Colour reddish brown. Length 16.5 cm. Found near the N. E. end.

Grave 19. Almost circular grave-pit. Diam. about 0.6 m., depth 0.6 m. — Filled with black soil.

*Grave 20.* Oval grave-pit. Diams. 0.6 m. and 0.4 m., depth 0.6 m. Direction W. + 10° N. - E. + 10° S. - Filled with soil.

Grave 21. Circular grave-pit. Diam. o.6 m., depth about o.6 m. — Filled with black soil. Contained:

- a. (Pl. 16, Fig. 10). Spoon of clay with shallow circular bowl; handle in the shape of the head of an alligator (?). Colour reddish brown. Length 15.17 cm.
- b. Bowl (Fig. 47), almost hemispherical, with three small knobs as legs. Colour reddish brown. Height 6.4cm. Diam. 12.8cm.



Fig. 47. Bowl found in Grave 21. —  $(\frac{1}{2})$ . (Cat. No. 1900. 3. — 6.24).

Grave 22. Oblong grave-pit. Length 0.7 m., breadth 0.35 m., depth 0.7 m. Direction N.—S. — Filled with soil. Contained at the N. end a bowl (a) and, close together in the S. end of the grave, a diminutive pot, a stone celt and a polishing-stone:

- a. (Pl. 16, Fig. 7). Bowl, shallow, on annular base. Each side has a small animal's head and fore-feet in relief. Base has four small vertical perforations. Colour red. Height 7.5 cm. Diam. 14 cm.
- b. Diminutive globular vessel, resembling Pl. 6, Fig. 8, of red colour. Height 7.5 cm. Diam. 14 cm.
- c. Celt of greenstone. Resembling Pl. 24, Fig. 1, but with elliptical section. Length 8 cm.
  - d. Polishing-stone (?) similar to Pl. 20, Fig. 11, but more flattened. Length 2.7 cm.

Grave 23. Oval grave-pit. Length about 0.7 m., breadth 0.5 m., depth 0.6 m Direction W. + 40° N. — E. + 40° S. — Filled with soil. Contained:

- a. (Pl. 16, Fig. 6). Small tripod vase richly adorned with relief ornaments.. Colour reddish. Height 6 cm. Diam. 6 cm. Found close to the S.E. end.
- b. Small tripod vessel (Fig. 48), egg-shaped with almost erect rim, legs missing. Colour red. Height of the body 7 cm. Diam. 5 cm.



Fig. 48. Vessel found in Grave 23. —  $\binom{1}{2}$ . (Cat. No. 1900. 3. — 6.30).



Fig. 49. Spoon found in Grave 23. —  $\binom{1}{i}$ . (Cat. No. 1900. 3. — 6.81).

c. Small spoon (Fig. 49) with shallow, circular bowl; handle in shape of a conventionalized head. Colour yellowish. Length 7.9 cm.

Grave 24. Almost circular grave-pit. Diams. 0.4 m. and 0.5 m. Direction W. + 60° N. — E. + 60° S. — Filled with soil. No other contents.

The elliptical mound containing the above-described 24 graves was, as has been stated, of low elevation, and passed almost imperceptibly into the surrounding ground. The direction of its length was almost exactly East and West. The stone-cists in the eastern end of the mound were all rectangular, sometimes, however, broader at one end than at the other. The walls were formed by a single row of limestone slabs placed on end, of a thickness of only about 6-10 cm.; the end walls were, in places, somewhat thicker. At each of the sides there were either 2, 3 or 5 slabs, at the ends only 1 or 2. The slabs forming the walls were firmly fixed in the ground, penetrating some inches below the surface of the floor. On our taking up the floor slabs, the walls usually remained standing. The roof was formed of from 2 or 3 to 7 or 8 thin slabs, so placed that they were immediately adjacent to one another, or else overlapping to a greater or less extent. It was easy to perceive that many of the roof slabs had been artificially thinned off towards the edge, especially along the sides. They were placed so as just to cover the tops of the walls of the cists, without projecting beyond to any appreciable extent. The floor consisted of from 3 to 5 slabs. The cists were come upon, as has been said, 1-11/2 metres below the surface of the mound. Most (7) of them were approximately in the direction E. — W., the others in a variety of other directions. All were entirely, or almost so, filled with soil, taken evidently for the most part from the adjacent ground. There prevailed a very hard, almost cement-like, red clay. It was only by exercising the greatest caution, that by the use of a knife I was able to dislodge the brittle clay vessels that had been firmly embedded in this hard material. Patches of black mould were found here and there in the clay. In the centre of the graves, towards the bottom, I observed that the clay was of a different composition in many cases, presumably owing to its admixture with extraneous ingredients from the decomposing dead bodies or the remnants of the bones and integument; the result was that the clay at these places proved quite loose and granular, being also of a whitish colour.

No trace of any bones was met with in the cists. Judging by the smallness of the graves, it would seem as though no full-sized bodies had been laid to

rest here extended at full length, for in that case the graves would have measured at least I.50—I.60 metres in length. That the mound should have contained only children's graves is not likely. Hence we may presume that these graves were used to deposit the bones in, after the other parts of the bodies had been decomposed by previous temporary exposure. In making excavations in other places I had subsequently opportunities of proving that this surmise was well founded. Quite small stone cists were found in several places to contain remnants of skeletons, which had been apparently deposited in them in bundles.

With regard to the position in which the finds were discovered to lie in the cists, nothing was made out which pointed to any systematic arrangement having been observed; in some cases they were at the narrow end, in others at the broad end and in one or two cases in the middle.

The depth at which the objects were found varied considerably, so that it is impossible to establish any definite rule. Generally they were come upon at about half the depth of the cist or towards the bottom of it. Some, however, were found near the top, which proves that the cists were filled up with soil at the time the skeletons were deposited. Moreover, it is not possible to assume that the soil can have been a later addition to the contents of the cists, due for instance to a deposit occasioned by physical causes, such as rain or earthquakes, from the circumstance that the lids are so impervious, owing to the stone slabs of which they are formed overlapping one another. The fact of one or another of the cists not being quite full of soil is explained by the sinkage that would arise subsequent to the further decomposition of the skeleton below.

The vessels in the stone cists at Santiago were, as a rule, in very good preservation. They do not show any signs of having been in use very much. Only one or two were sooty. It is remarkable that most of the vessels found in the cists are exceptionally small in size. Only a few are large enough to have been used for practical purposes. The others were probably consecrated to ceremonial purposes exclusively. It is indeed possible that they were manufactured solely to be placed in the graves as symbolical of larger ones. A parallel to that custom of depositing with the dead diminutive objects, to represent larger ones in daily use, may be cited from the Talamanca Indians, belonging to the Guëtar group. In a short review of what is at present known as to the burying customs among the present-day Indians in Costa Rica, which it is intended will appear at the close of this work, further reference to this point will be made.

In subsequent excavations in the highland plains I nowhere found anything like so many diminutive vessels in graves as here; investigations, however, on

the Pacific coast brought to light a still larger number of very small vessels deposited with the dead.

The clay vessels of the cists were all more or less filled with soil; in some cases there was a slight admixture of charcoal dust.

The other species of graves in the area of the mound was also represented by 12 graves, which lay very close together in the western half of the area, and at about the same depth  $(I-I'/_2 \text{ m.})$  as the stone cists. As has been said, they were all filled with soil; some of them contained vessels at varying depths — though generally half way down or rather more. The vessels here were similar, both in form and construction, to those in the stone cists. An exceptional specimen, found in Grave 16, is the large ornamented vase described above.

The same kind of clay was employed in the manufacture of the vessels found in both species of graves. The clay contained, as a rule, a large quantity of small, white grains of limestone.

In the soil immediately above every grave-pit and every stone cist, cobble stones of differing sizes were found in layers. Nearer the surface too, stones of the same kind were present. It is presumable that some of these stones were formerly placed in rings on the surface of the ground above the grave-pit or stone cist, and that they were subsequently shifted in position when the ground was cleared. A few piles of stones near by, plainly of more recent origin, supported the idea that the ground had been cultivated, perhaps even ploughed. The custom of placing such stone circles to mark graves I subsequently found to be almost universal throughout the province of Cartago.

The soil above the graves also contained a large quantity of potsherds, almost all of which were red or yellow in colour. The soil at the western end more especially was intermixed to a very large extent with potsherds, for the most part undoubtedly remains of vessels broken on the spot. Other vessels, on the other hand, had been deposited in the ground, above or between the graves, and were now lying broken to pieces by the pressure of the weight of the soil and the stones. A few vessels, however, I managed to secure whole or nearly so. They were all found in the western half of the area of the mound.

a. (Pl. 16, Fig. 12). Rectangular, shallow stone vessel in the shape of a puma. Feet and tail previously broken off and missing. Length 32 cm. Height 6.5 cm. Found standing almost in the very centre of the mound, about half a m. below the surface on the S. side of an oblong flat stone between the

graves 7, 9, 13 and 10. This oblong stone had, without doubt, previously stood in an erect position.

- b. (Pl. 16, Fig. 11). Clay spoon, painted red. At the base of the handle there is a degenerate human head; the bowl is circular and shallow. Total length 12.3 m. Found about half a metre below the surface in the soil on the S. side of Grave-pit 18. Close to this spoon was found:
- c. Bowl, tripod, broken, resembling Fig. 47 on page 59. Height 7.5 cm. Diam. 14 cm.
- d. Vessel-support, broken, resembling Pl. 44 Fig. 7, but considerably larger, being 11 cm. in height, 18 cm. in diam. Traces of red paint. Found in the soil between Grave-pits 13 and 14, at their E. end.
- e. Bowl, large, hemispherical, broken, on annular base, resembling Pl. 22, Fig. 4. Painted red. Height 17 cm. Diam. about 20 cm. Found at one metre below the surface between cists 11 and 12 at their E. end.
- f. Bowl, hemispherical, on annular base (Fig. 50). Painted with parallel bands and a row of the characteristic terraced hook-ornaments in red (now partly obliterated) round the shoulder. On one side there is a trace of a projecting ornament, possibly an animal's head, that has fallen off. Height 6.3 cm. Diam. 9 cm. Found between Grave-pits 13 and 14 at the W. end.
- g. Diminutive shallow tripod bowl (Fig. 51). Painted red. Height 4.3 cm. Diam. 7.8 cm. Found about 1 m. below the surface at the W. end of Grave-pit 23.
- h. Diminutive, almost cylindrical tripod vessel (Fig. 52), with an animal or human face in relief occupying one side of the vessel, and with small, degenerate animals' heads on the feet. Colour red. Height 5.2 cm. Diam. 5.1 cm.



Fig. 50. —  $\binom{1}{2}$ . (Cat. No. 1900. 3. — 6.38).



Fig. 52. —  $(^{1}/_{2})$ . (Cat. No. 1900. 3. — 6-34).



Fig. 51.  $-(\frac{1}{2})$ . (Cat. No. 1900. 3. -6.35).



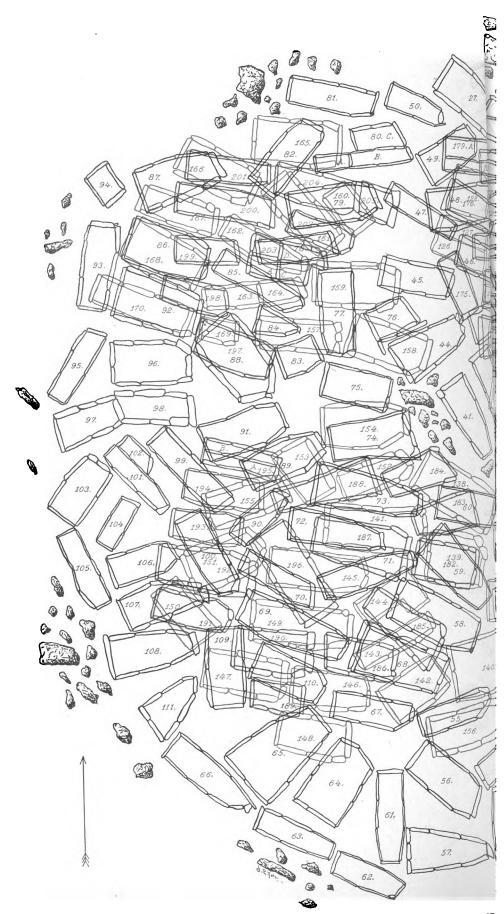
Fig. 53. —  $(^{1}/_{2})$ . (Cat. No. 1900. 3. — 6.42).

- i. Human figure, mutilated, a crude representation of the flute-playing god, sculptured in a brick-red soft stone (Fig. 53). Height 9.2 cm.
  - j. Celt of greenstone, flattened (Fig. 54). Length 5.8 cm.

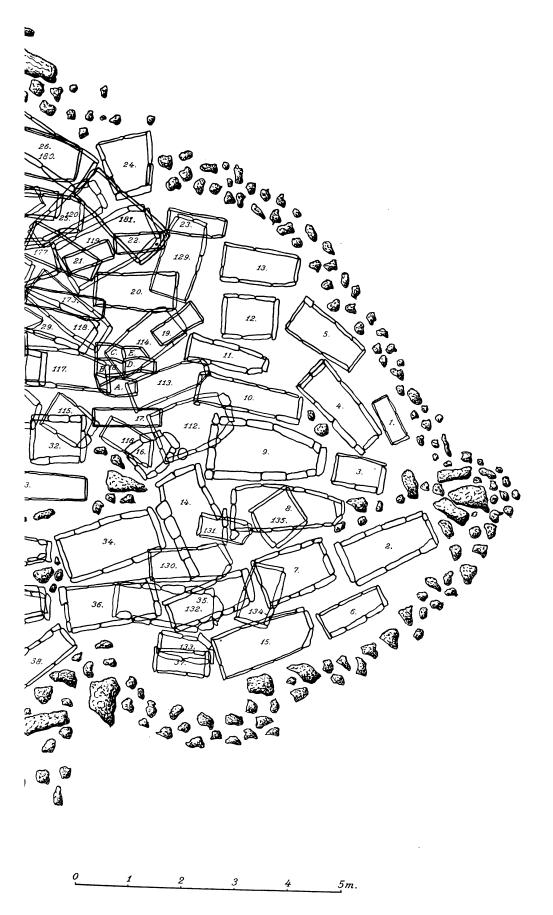
While staying in Santiago I made some excursions into the mountains higher up; I did not, however, come upon any burial grounds that were at all well preserved. Excavations had already been carried out at La Flor, a small plantation about 2 leagues further up in the mountains. There I found a fairly large number of stone circles, from I to I'/2 m. in diameter, arranged closely adjacent one to another on the slope of a hill. A considerable number of graves had been found here by the owner of the ground. He stated that he had found in the graves some small pots and some beads of a kind of stone, white in colour and resembling crystal, and also a small bronze figure. By reason of the difficulty I experienced in securing workmen, owing to their being all occupied with coffee-planting, I was constrained to give up all thoughts of commencing any investigations at that place for the time being.



Fig. 54. — (1/1). (Cat. No. 1900. 3. — 6.40).



PLAN OF BUR



AT CHIRCOT.

## II.

## CHIRCOT.

artago, the former capital of Costa Rica, is situated 1,464 m. above the sea, at the foot of the volcano Irazu, the crater of which attains a height of 3,415 m. One of the outlying valdeas or suburbs, situated about three kilometres west of the city, bears the Indian name of Chircot. Nowadays, however, the population of Chircot includes no pure-blooded Indians. All the inhabitants are of the same mixed Spanish-Indian descent as the majority of those of the city itself. No other signs of the ancient Indian village are now left but a few stone-circles in a meadow near the old church. Immediately above Chircot rise the first slopes of Mt. Irazu; here extensive meadows, green all the year round, alternate with fields of corn, beans, vegetables etc. Up the slopes, at about 500 m. above the valley and close to the small ranch Angelina, lies an extensive ancient burial ground. From this point of vantage may be seen, here and there in the distance, on the surrounding slopes and hills, other ranches, distinguishable by their adobe houses, which generally have some fruit trees growing near. The owners, as a rule, have houses in Cartago too, where they live for part of the year, passing the \*temporadas\*, the planting and harvest periods, on these farms. Some of the ranches, however, on the slopes of Mt. Irazu, are inhabited all the year round.

The burial ground described below is situated on a broad, open, flat hill. From it magnificent views are obtained. On one side may be seen the extensive valleys chequered with fields and coffee-plantations, while far beyond, near the horizon, a glimpse may be caught of the glittering waters of the Pacific. On

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<sup>1</sup> See Pl. 19. Photo by the author.

the opposite side, looking up to the volcano, the eye first meets with a succession of open cultivated slopes and wide, terraced table-lands, broken by steep gullies, while further up, the continuous stretch of gloomy forest which occupies the highest altitudes.

At first sight hardly any signs of the remarkable burial grounds are noticeable. The unwooded, sloping hill, bounded on one side by a narrow gulch and on the other by a modern stone-wall, only exhibits what was once an extensive corn-field, now overgrown with innumerable weeds. Of these weeds the ubiquitous Pteris Aquilina L., a creeping Rubus with white flower and black berry, and a small yellow-flowered synanthé are the most conspicuous. The field will shortly have very much the same vegetation as the surrounding meadows. On examining the ground, which consists of black humus, I found broken pieces of limestone slabs scattered here and there. The stone-wall which fences off the field, also contained a considerable number of slabs. The owner of the land, years ago, had several cart-loads of similar slabs brought down to Cartago, to be used in the construction of an acequia in his yard. Having obtained this information on the spot, I visited and examined the field where the slabs had been taken. On the ground being probed with the steel rod, the roofs of stone cists were struck in many places; the hollow sound occasioned thereby was repeatedly heard in various parts of the field. I had now found what I had hitherto been vainly seeking for-a really extensive ancient burial ground, which had been left almost undisturbed, and where consequently an examination of the arrangement of the cists, as well as of their contents, could be made with advantage. The circumstance that the cists of this field lay rather deeper down than is usually the case, viz. at about 1-11/2-2 m. below the surface, had preserved them from being disturbed when the land was first laid under the plough. No trace was left, however, of stone-circles on the surface of the ground, which, as mentioned, usually indicate graves. But in the field, in several places, large heaps of stones were to be seen, which had been thrown together by those who had last tilled the soil. These stones were round or oblong cobble stones and of the same size as those generally used in the highlands for the low stone mounds or the circles marking the graves. These stones, like the slabs of the cists, had evidently been brought from some other locality to serve the purpose mentioned. In the gulch the composition of the soil could be plainly examined. It consisted to the depth of several metres exclusively of soft, black humus.

Investigations once started soon established the limits of the eastern side of the burial ground, for there a stone bordering was met with at about half a metre below the surface. This enclosure, which proved upon further examination

to extend almost all round the whole burial ground — there being gaps only on the N. W. and N. sides — had evidently had its upper part destroyed when the field was laid under the plough, the stones being moved to the heaps before mentioned. Several of the stones in this extensive enclosure were rather large, many were oblong in shape and  $1-1^{\prime}/_{2}$  m. high; they still stood, or showed signs of having stood, erect in the ground.

After the E. end of the enclosure had been exposed and cleared from soil, we came upon the stone cists, which proved to be of about the same shape as those at Santiago and to be constructed of limestone slabs as was the case there. After the first cists had been examined, we came upon another layer of similar cists immediately underneath, and even a third layer was struck in some parts. Every day we only laid bare as many cists as it seemed possible to examine on the same day, in order not to expose them to the tropical showers which came pouring down almost every night. The field was divided into squares and the position of the graves etc. was recorded on square-ruled paper, according to the method followed in all my work in Costa Rica. While my men were occupied with the uncovering of the graves, removing the great quantities of soil turned out, I carried out the work of examining the cists, using the handtrowel in my work. Each cist and the objects therein contained were drawn on square-ruled paper. In this way were recorded the contents of the whole of this cemetery, which was found to contain not less than III graves in the uppermost layer (marked black on the plan), 59 (Nos. 112-170) in the middle or second (marked red) and 35 (Nos. 171-205) in the third, the bottom (marked green). Thus there were here, crowded together in a small oblong space of about 20 metres in length and 15 in breadth, not less than 205 graves in all, many of them, however, only diminutive in compass.

The black humus which covered this complex of stone cists contained a fairly large percentage of ashes from numerous eruptions of Mt. Irazu. This soil has a wonderful capacity for keeping dry. Even after tremendous down-pours lasting for days, which would transform roads into streams and insignificant creeks into roaring torrents, the rain-water never penetrated more than perhaps about 10 cm. into this soft black humus mingled with ashes. The ground selected by the ancient Indians for their cemetery was a fairly flat hill-top sloping towards the South and exposed to sun and wind. I searched the surroundings in vain for signs of some ancient settlement.

Although the rainy season had set in, I found it possible to carry on the excavations without very many interruptions. As a rule the heavy showers did not commence until evening or night. In the morning the hills were enshrouded

with mist and clouds, which were soon swept away, however, by the force of the winds and the sun. Had the soil, on the other hand, been soft clay for instance, there would hardly have been any possibility of carrying out the work before the dry season had set in.

The graves examined were the following:

Grave 1. (Figs. 56, 57). Rectangular cist of stone slabs. The roof was met with about 0.8 m. below the surface. Length of the cist 0.85 m., breadth

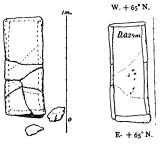


Fig. 56. Roof of Grave 1.

Fig. 57. Interior

o.3 m., depth o.24 m. The roof was composed of one large oblong slab, covering about half the cist, and five smaller pieces. These slabs were 5—8 cm. thick, the three at the bottom being of the same thickness. The walls consisted each of a single row of slabs, placed on edge. These were somewhat thicker than the slabs of the roof, while those at the bottom were about 10 cm. thick. The two end walls were each formed of a single slab. The cist, filled with loose soil of the same kind as that

surrounding the grave, contained only a few fragments of human bones, about 9 cm. below the roof. Outside the S. E. corner were two small, irregular boulders.

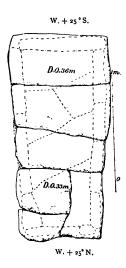


Fig. 58. Grave 2.

Grave 2. (Fig. 58). Rectangular cist. The roof was met with 0.6 m. below the surface. Length of cist 1.65 m., breadth at the S. W. end 0.65 m.; at the N. E. 0.55 m.; depth 0.36 m. at the S. W. end, 0.33 m. at the N. E. Three large, oblong slabs covered two-thirds of the cist, while three smaller ones roofed in the remainder, all about 6—9 cm. thick. The slabs of the walls were about 12 cm. in thickness. The N. side wall consisted of four slabs, the S. wall of three, the W. end wall of one large slab, the E. of one large stone and a piece of another. The grave was filled with loose soil and contained nothing else.

Grave 3. (Figs. 59, 60). Rectangular cist at about the same depth as the two preceding graves. The roof was formed of two slabs, the bottom of four, each of the side walls of two, and the ends each of one. Length of

cist 1 m., breadth about 0.6 m., depth 0.39 m. The cist was filled with loose soil and contained, besides a few small pieces of bone, one small vessel standing almost upright, 0.18 m. below the roof. Close to the bottom there were some fragments of broken pottery.

a. (Pl. 20, Fig. 4). Vessel, small, tripod, depressed globular, with a human (?) face in relief on the body, opposite to a broad handle. The space between the face and the handle is ornamented with rows of punctate markings

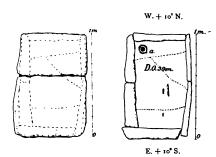
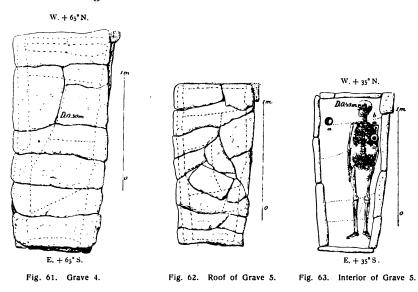


Fig. 59. Roof of

Fig. 60. Interior of Grave 3.

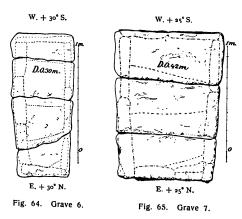
and double vertical fillets. The inner side of the rim is decorated with parallel rows of transverse streaks of whitish yellow paint, now however partly obliterated. The feet are three small conical knobs, each with three perforations. Colour reddish brown. Height 6 cm. Diam. 8 cm.



Grave 4. (Fig. 61). Almost rectangular cist, somewhat narrower at the S. E. end. Length 1.8 m., breadth about 0.6 m., depth 0.5 m. The roof consisted of eight slabs of various sizes, placed close to each other; the bottom was formed of five slabs; the walls were fairly strong; each of the side walls consisted of four slabs; the N. W. end wall was composed of a double row of slabs, each row containing two; the S. E. end wall was formed of one slab only. The cist was filled with loose soil. No other contents.

Grave 5. (Figs. 62, 63). Almost rectangular cist, somewhat narrower at the eastern end. Length of cist 1.45 m., breadth about 0.5 m., depth 0.45 m. The roof, partly double, consisted of a great number of slabs of various sizes. The bottom was composed of six slabs, the N. W. end wall of one large and one small slab, the S. E. of only one; the N. side wall of four, the S. of three. About 12 cm. below the roof I found a skeleton, much decomposed, with crushed skull. It was lying on its back, close to the N. wall, with arms to sides and legs stretched out in line with the trunk; the head was at the N. W. end and fairly close to the end wall. The face was turned upwards a little to the right. Deposited with the body the following objects were found:

- a. (Pl. 20, Fig. 7). Bowl, small, shallow, with almost upright walls. Colour terracotta with three encircling black bands on the outer side, two on the inner. These paintings are now, however, almost obliterated. Height 4.1 cm., diam. 7.4 cm. The bowl was found standing close to the S. wall on a line with the shoulder of the skeleton and 15 cm. below the roof.
- b. (Pl. 20, Fig. 11). Oblong pebble, probably used for polishing pottery. Colour milky white. Length 4 cm. Found close to the left shoulder of the skeleton.
- c. (Pl. 20, Fig. 10). Bowl, tripod, small, globular of reddish brown colour. A small, grotesque, frog-like creature on each side of the shoulder forms a handle. Height of vessel 6.3 cm. Diam. 7.5 cm. Found on the skeleton's left humerus.

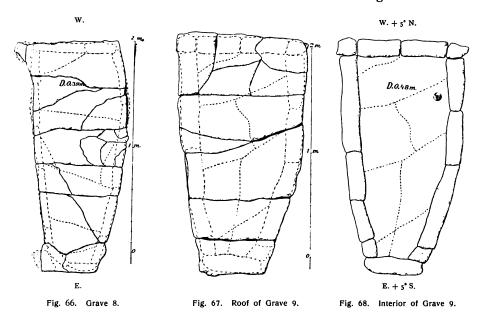


Grave 6. (Fig. 64). Rectangular cist. Length 1.15 m., breadth about 0.35 m., depth 0.3 m. The roof consisted of four large slabs, the bottom also of four and a small piece; each of the walls of three. Filled with loose soil, but no other contents.

Grave 7. (Fig. 65). Almost rectangular cist. Length 1.2 m., breadth about 0.7 m., depth 0.42 m. The roof consisted of three large, rectangular

slabs; the bottom of three and a small piece; the end walls and the southern side wall each of two slabs; the northern side wall of four. Filled with loose soil. No other contents.

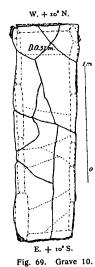
Grave 8. (Fig. 66). Large, oblong, somewhat irregularly shaped cist. Length 1.9 m., breadth 0.4—0.8 m., depth 0.39 m. The roof, partly double, was composed of a number of slabs. The bottom and the walls also consisted of a number of slabs of different sizes. Filled with loose soil with a few small fragments of pottery to 0.6 m. below the roof. Contained nothing else.



Grave 9. (Figs. 67, 68). Large, oblong cist, narrower at the E. end. Length 2 m., breadth 0.85 m. at the W. end, 0.5 m. at the E., depth 0.48 m. The roof and bottom consisted of a number of large slabs. The walls were composed of numerous slabs of considerable thickness. The grave was filled up to the roof with soil, and contained one small pot placed upright 0.28 m. below the roof in the N. W. corner, and a few small pieces of charcoal.

a. Small pot (resembling Pl. 6, Fig. 8), globular, with almost upright rim. On the shoulder there is a knob on either side, composed of five pellets of clay. Colour reddish brown, darkened by soot. Contained fragments of charred corn. Height 5.8 cm. Diam. 7 cm.

Grave 10. (Fig. 69). Rectangular, long, narrow cist. Length almost 1.9 m., breadth 0.4 m., depth 0.57 m. The W. end wall was broken down. The roof, bottom, and side walls were composed of a large number of slabs, the end walls each of one slab. The grave was filled with soil up to the roof. Inside the cist



nothing but this was found, but outside, close to the N.W. corner and at 0.12 m. distance from the N. side wall, a small pot, a, was found, 0.42 m. below the level of the roof. Remains of a skeleton were also met with along the same wall, in the space between Grave 10 and Grave 11.

a. Vessel small, tripod (resembling Pl. 37, Fig. 5), with a human face in relief on one side, on the opposite a small handle (now lost), extending from the margin of the rim to the upper part of the shoulder. The legs are missing. The circular marks left by the lost legs are blackened by soot. The original colour was red, but the vessel is now wholly blackened with soot. Height 6.6 cm., diam. 8.5 cm., diam. of orifice 4.3 cm. Broken.

depth 0.33 m.

Grave 11. (Figs. 70, 71). Oblong cist. Length 1.3 m., breadth about 0.4 m., The roof and bottom are each composed of a number of slabs,

the side walls of three, and the end walls of one each. The grave was filled with loose soil and contained one small vase lying 0.18 m. below the roof.

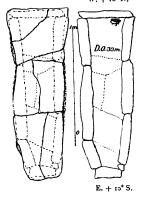


Fig. 70. Roof Fig. 71. Interior of Grave 11. of Grave 11.

a. (Pl. 20, Fig. 5). Vase small, tripod, with depressed hemispherical body and with outward bent, almost horizontal, rim. On either side of the body there is an animal's face in relief and half way between these animals' faces there are two small perforated ears standing out perpendicularly from the vase. The vase is of a red colour, the rim and upper part of the body being decorated in white paint with parallel and crossing lines, now, however, almost obliterated. Height of vessel 5.5 cm., diam. 9 cm.

At a distance of 0.24 m. outside the W. end of the grave a large, broken vessel, b, was found, 0.15 m. above the level of the roof.



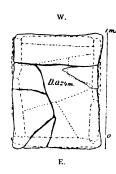
Fig. 72. — (1/2).

This vessel, a large, shallow tripod bowl (resembling Pl.24, Fig. 10, but considerably larger), of a blackish brown colour, was badly broken; it was decorated on the outside with incised geometrical figures. A portion of these is shown by Fig. 72. An animal's head projects from the base of the rim. Legs in the shape of animals' heads. Height of the body 6 cm. Diam. about 27 cm.

Grave 12. (Fig. 73). Almost quadrangular cist. Length 0.8 m., breadth 0.6 m., depth 0.24 m. The roof and bottom were composed of several slabs, the

side walls each of two, the end walls of one. The grave was filled with loose soil. No other contents.

Grave 13. (Fig. 74). Rectangular cist. Length 1.3 m., breadth about 0.55 m., depth 0.18 m. The roof and the bottom were composed of a number of slabs; the side walls of resp. two and three slabs; the end walls each of one. The grave was filled with soil, containing a few scattered pieces of charcoal.



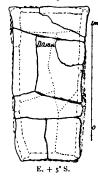


Fig. 73. Grave 12.

Fig. 74. Grave 13.

Grave 14. (Figs. 75, 76). Almost rectangular, but somewhat irregularly shaped, stone cist. Length 1.35 m., breadth about 0.75 m., depth 0.3 m. The roof and the bottom were composed of a number of slabs. The walls were formed of unusually massive, oblong, flat stones, 0.15—0.25 cm. thick; some of the slabs at the S. E. end were missing. The grave was filled with soil to 3 cm. below the roof. In the N. corner, at a, a small, broken bowl was lying 21 cm. below the roof.

a. Vase, small, tripod, slightly depressed globular, of red colour, broken. Resembles Pl. 20, Fig. 10. Contained charred corn. Height about 8 cm., diam. 8.7 cm.

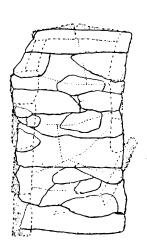


Fig. 75. Roof of Grave 14.

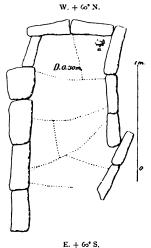


Fig. 76. Interior of Grave 14.

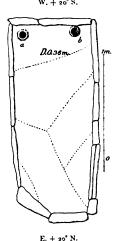


Fig. 77. Grave 15.

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Grave 15. (Fig. 77). Rectangular cist, roofed with several irregular slabs. Length 2.1 m., breadth 0.85 m., depth 0.36 m. Filled with soil to 0.6 m. below the roof. The grave contained:

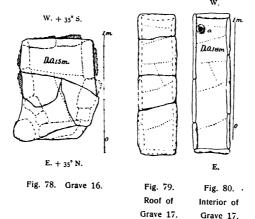
a. (Pl. 20, Fig. 1). Small, tripod vase, decorated on one side with an animal's head with four eyes and two rudimentary fore-feet, on the other with rudiments of a tail and hind-legs. Colour, reddish brown, darkened by soot. Height 6 cm. Diam. 9.5 cm. Found standing 9 cm. below the roof in the S. W. corner, at 6 cm. from the walls.

b. (Pl. 20, Fig. 3). Vase, small, tripod, of reddish brown colour, with two small ears near the orifice. The shoulder decorated with rectangular, incised panels with a chequered pattern. Height of vessel 7.5 cm., diam. 10.3, diam. of orifice 6.2 cm. Found standing 15 cm. below the roof in the N. W. corner, fairly close to the end wall.

Outside the cist, 15 cm. from the N. wall, a broken, tripod bowl (Pl. 20, Fig. 2) was found about 6 cm. under the level of the roof.

This vessel is fairly large with low walls and flattened bottom; the colour is yellow. The outer side is decorated with three repetitions of a design in black, showing two combined, conventionalized birds' heads. The legs of the vessel have the shape of highly conventionalized animals' heads. Height of vessel 11.6 cm., diam. at the top 16.5 cm.

Grave 16. (Fig. 78). Small, oblong cist. Length 0.7 m., breadth 0.3-0.6 m., depth 0.15 m. The roof was composed of five slabs, the bottom of three. The



walls consisted of massive slabs, 15—17 cm. thick. Close to the E. corner there was a small, irregular boulder. The grave was filled with loose soil to about 9 cm. from the roof. No other contents.

Grave 17. (Figs. 79, 80). Rectangular cist. Length 1.25 m., breadth 0.3 m., depth 0.18 m. The roof consisted of four slabs, the bottom of seven, the side walls each of three, the end walls each of one. The cist was filled with soil. In the S. W. corner, 12 cm. below the roof, was found:

a. (Pl. 20, Fig. 6). Small vase, low, tripod, with outward-turned, almost horizontal, flattened rim; on one side of the shoulder a small animal's head and

two rudimentary fore-feet, on the opposite side a tail; almost the whole body is decorated with white cross lines. Colour, red. Height 5.6 cm. Diam. 8.5 cm.

Grave 18. (Fig. 81). Under one common roof of numerous slabs a complex of five small cists of irregular form was found.

- A. Cist. Length 0.65 m., greatest breadth 0.3 m., depth 0.15 m. Filled with loose soil. Contained:
- a. Shallow, tripod bowl, with almost flat bottom. Resembles in general shape Pl. 24, Fig. 10, but without any ornaments incised or in relief. The colour is yellowish. The walls are decorated both inside and out with three simple, rectangular figures, formed by broad bands of a purplish colour. Height of vessel 6.1 cm., diam. 10.6 cm.
- B. Cist. Length 0.5 m., breadth about 0.35 m., depth 0.18 m. Filled with loose soil. Contained nothing else.
- C. Cist. Length 0.45 m., breadth about 0.25 m., depth 0.15 m.



Fig. 81. Grave 18.

This small cist was filled with loose soil, which contained the skeleton of a full-grown person, the bones being in a heap; fragments of the skull and a couple of teeth of a full-grown person were still distinguishable. In the N. W. corner, fairly close to the skull and lying on the floor was met with:

- a. Small, round pebble, probably for polishing ollas. Diam. about 3.5 cm.
- D. Cist. Length 0.55 m., breadth 0.2 m., depth 0.18 m. Filled with loose soil.
- E. Cist. Length 0.35 m., breadth 0.17 m., depth 0.18 m. Filled with loose soil. Contained a small bell of copper, about 1.5 cm. high, and close beside it a bird's breast-bone about 5 cm. long. This bone, owing to its proximity to the copper bell, had become coated with verdigris, and that had preserved it intact. Both these objects, however, were unfortunately afterwards lost in transport.

Grave 19. (Fig. 82). Rectangular cist. Length 0.85 m., breadth about 0.3 m., depth 0.18 m. The roof consisted of two large and two small slabs, the side walls each of two, the end walls each of one. Filled with loose soil. Contained nothing else.

Grave 20. (Fig. 83). Oblong cist. Length 1.45 m., breadth about 0.6 m., depth 0.21 m. The roof and bottom consisted of

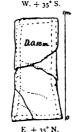


Fig. 82. Grave 19.

numerous slabs, the side walls each of three, the end walls of two. The E. end was partly broken down. The cist was filled with soil, which contained a

few pieces of charcoal scattered here and there. On the top of the roof, near the W. end wall, a bowl was found standing upright.

a. Large, shallow, tripod bowl of a red colour. Resembles in shape Pl. 38, Fig. 3, but without the animal's head etc. in relief; the legs are formed as simply modelled animals' heads with two

ears. The walls are decorated outside with a design (see Fig. 84) in yellow. thrice repeated. Inside the rim there runs a simple pattern of parallel wavy and straight lines. Diam. 22 cm.



Fig. 84. — (1/3)

E. Fig. 83. Grave 20.

Height 14.5 cm.

Painted Ornament outside the Bowl in Grave 20.

Grave 21. (Fig. 85)1. Rectangular cist. Length 0.85 m., breadth 0.3 m., depth 0.13 m. Filled with loose soil. Contained a few fragments of red pottery.

Grave 22. (Fig. 86). Rectangular cist. Length 0.85 m., breadth 0.3 m., depth 0.15 m. Filled with loose soil. Contained nothing else.

Grave 23. (Fig. 87). Almost rectangular cist. Length 1 m., breadth at the W. end 0.4 m., at the E. end 0.25 m., depth 0.18 m. Filled with loose soil with

W. + 25° S. E. + 25° N.

Fig. 85. Grave 21. Fig. 86. Grave 22.

Fig. 87. Grave 23.

traces of charcoal to 3 cm. from the roof. At 12 cm. below the roof a small pot was found, turned upside down in the N.W. corner.

a. Vessel, almost globular, with a handle on one side, somewhat resembling Pl. 28, Fig. 4; originally red, now much darkened by soot. On the upper part of the shoulder there is a degenerate animal's head in relief,

<sup>1</sup> The roofs of the cists being all of the same construction, it was deemed unnecessary to draw them all. In the following therefore only the walls and the bottom slabs are figured.

and on the opposite side a handle, formed by a human figure and extending from the margin of the rim to the shoulder. Other decorations are rows of small, incised pellets. Height of vessel 9 7 cm., diam. 8.7 cm.

Grave 24. (Fig. 88). Cist in the shape of a truncate triangle. Length 1 m., breadth at the N. end 0.9 m., at the S. end 0.55 m., depth 0.33 m. The grave

was filled with loose soil almost to the roof; about 18 cm. below it, along the E. side wall, it contained a highly decomposed skeleton lying on the back, head to the N., face upwards and turned a little to the right; some of the arm-bones were placed above the head, others on top of the chest; the femora alongside the body on either side, while the tibiæ were crossed. In the W. corner there was found:

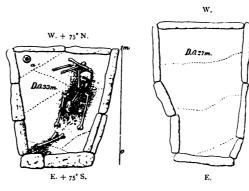


Fig. 88. Grave 24.

Fig. 89. Grave 25.

a. Bowl, depressed globular, tripod, with two tiny animals' heads, forming the ears. The shoulder shows an incised chessboard decoration with six fields on one side, eight on the other. The vessel resembles Pl. 20, Fig. 3. Colour, red. Height 6 cm. Diam. 7.7 cm. Broken.

On the roof close to the N. end wall was found standing:

b. Bowl, shallow, tripod, rather large, with low walls and flattened bottom. Legs conventionalized animals' heads. Colour, bright brick red; no decoration. It resembles in shape Pl. 24, Fig. 10. Height 7.5 cm., diam. 16.1 cm. Broken.

Grave 25. (Fig. 89). Oblong cist. Length 1.2 m., breadth at the W. end 0.8 m., depth 0.27 m. Filled with loose soil.

Grave 26. (Fig. 90). Rectangular cist. Length 1.9 m., breadth 0.55 m., depth 0.54 m. Filled with loose soil.

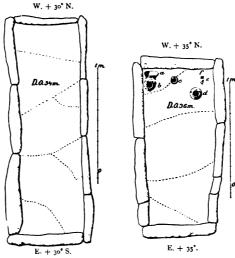


Fig. 90. Grave 26.

Fig. 91. Grave 27.

Grave 27. (Fig. 91). Rectangular cist. Length 1.45 cm., breadth about 0.85 m., depth 0.36 m. Filled with loose soil almost to the roof. At the N. W. end the following objects were found:

- a. (Pl. 20, Fig. 14). Bowl, tripod, shallow. Flush with the rim a small animal's head, on either side of that two small triangular lobes; on the opposite side a tail. Colour, black; only the incised lines on the legs are painted white. Height 8 cm. Diam. 14 cm. Found in the S. W. corner, 15 cm. below the roof.
- 6. (Pl. 20, Fig. 13). Vase, tripod, bright red, very richly decorated with designs in relief. Small, grotesque figures form ears. The intermediate spaces on the shoulder are each decorated with an animal's head in relief and on both sides of it two vertical incised fillets. The rim is adorned with incised knobs all round the margin. The legs have the shape of small, very degenerate, animal figures. Height 10 cm. Diam. 10.7 cm. Found close to bowl a.
- c. (Pl. 20, Fig. 8). Diminutive, tripod bowl with but one handle. A double row of punctate markings round the neck and the edge of the rim. This vessel, originally of red colour, is blackened by soot. Height 4.5 cm. Diam. 6.5 cm.
- d. (Pl. 20, Fig. 15). Tripod vessel with two ears formed by figures of animals. The intermediate spaces are each decorated with four vertical fillets of clay with punctate markings and a similarly adorned string round the body. The three legs, with animals' faces in relief, are almost worn off by use. The vessel, originally of dark brown colour, is blackened by soot. Height 8 cm. Diam. 10.5 cm. It was found at the very bottom, in the N. W. corner.
- e. (Pl. 20, Fig. 12). Diminutive human mask of clay. The conical hat is perforated for suspension. Colour, reddish brown. Height 3 cm. It was found 14 cm. below the roof and close to d in the N. W. corner.
  - f. Particles of pyrites were found close to the bottom, in the N. W. corner.

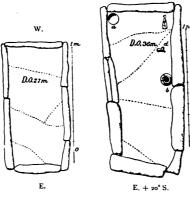


Fig. 92. Grave 28.

Fig. 93. Grave 29.

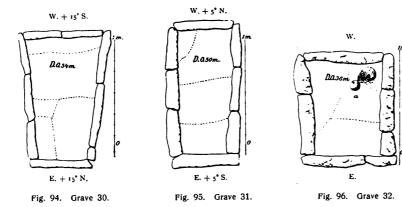
Grave 28. (Fig. 92). Rectangular cist. Length 1.1 m., breadth about 0.5 m., depth 0.27 m. Filled with loose soil only.

Grave 29. (Fig. 93). Almost rectangular cist. Length 1.35 m., breadth about 0.5 m., depth 0.36 m. Filled with loose soil to 6 cm. below the roof. Contained:

a. (Pl. 21, Fig. 13). Nearly hemispherical, roughly made bowl with annular base and three projecting knobs round the

body. The inner side of the rim is decorated with broad, russet-coloured bands. The base has three large perforations. Colour, brick red. Height 5.8 cm. Diam. 11 cm. It was found in the S. W. corner, 25 cm. below the roof.

- b. (Pl. 21, Fig. 11). Vessel; almost globular, with two small figures of animals in relief as ears. At the side of the ears there are traces of two short parallel, vertical strings. The vessel, originally of a red-brown colour, is now darkened by soot. Height 8 cm. Diam. 10.5 cm. It was found 27 cm. below the roof, close to the N. wall.
- c, (Pl. 21, Fig. 9). Flat, almost triangular, roughly chipped celt of greenstone. Length 9.5 cm. Found 30 cm. below the roof, in the N. W. corner.
- d. (Pl. 21, Fig. 5). Broken handle of a large clay spoon, with a grotesque human figure (right leg missing) at the end. Colour, brick red. Height of the figure 7.5 cm. Found 25 cm. below the roof, near the N. wall.



Grave 30. (Fig. 94). Almost rectangular cist. Length 1.1 cm., breadth at the W. end 0.7 m., at the E. end 0.45 m., depth 0.54 m. The N. side wall partly broken down. Filled with loose soil. Contained nothing else.

Grave 31. (Fig. 95). Rectangular cist. Length 1.2 m., breadth 0.45 m., depth 0.5 m. Filled with loose soil only.

Grave 32. (Fig. 96). Nearly quadrangular cist. Length 0.85 m., breadth 0.65 m., depth 0.36 m. Filled with loose soil. Contained fragments of a skull about 20 cm. below the roof and also:

a. (Pl. 20, Fig. 9). Bowl, depressed globular, tripod, with two small knobs on the shoulder. On



Fig. 97. — (1,3).

each side of the shoulder a rectangular panel, containing a chequered field, flanked by vertical, parallel lines (Fig. 97). Colour, blackish. The legs are painted white. Height 6.3 cm. Diam. 9.5 cm. Found turned upside down close to the skull, 27 cm. below the roof.

Outside the cist, 10 cm. from the N. W. corner and 6 cm. above the level of the roof, was found a shallow, tripod bowl, broken into pieces. Each leg has the shape of a degenerate, winged animal with head turned upwards. Colour, red. The outside of the wall is adorned with a simple geometrical design in yellow, thrice repeated. Height 10 cm. Diam. about 20 cm.

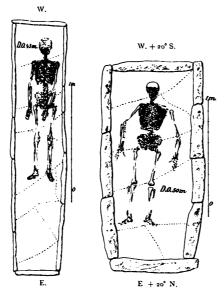


Fig. 98. Grave 33.

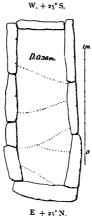


Fig. 100. Grave 35.

Fig. 99. Grave 34.

W. + 10° S.

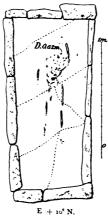


Fig. 101. Grave 36.

Grave 33. (Fig. 98). Rectangular, exceptionally narrow, long cist. Length 2.3 m., breadth about 0.45 m., depth 0.45 m. Filled with loose soil almost to the roof. Contained a skeleton lying extended full length on its back with head to the W., face upwards; the left arm across the pelvis, the other arm and the legs straight.

Grave 34. (Fig. 99). Rectangular cist. Length 2 m., breadth about 1 m., depth 0.5 m. Filled with loose soil. Contained almost in the middle of the grave a skeleton, badly decomposed, lying outstretched on its back, head to the W., face turned upwards.

Grave 35. (Fig. 100). Rectangular cist. Length 1.4 m., breadth 0.45 m., depth 0.36 m. Filled with loose soil. Contained nothing else.



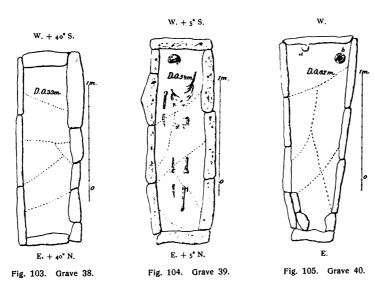
Fig. 102. Grave 37.

Grave 36. (Fig. 101). Rectangular cist. Length 1.5 m., breadth about 0.6 m., depth 0.6 m. Filled with loose soil. Contained traces of a skeleton lying outstretched.

Grave 37. (Fig. 102). Rectangular cist. Length 0.9 m., breadth 0.4 m., depth 0.2 m. Filled with loose soil to 5 cm. from the roof. This small cist contained remnants of two skeletons very much decomposed; the bones had evidently been brought from elsewhere and finally deposited here. The broken skull of the one I found near the N. E. corner, that of the other in the middle of the grave. At the W. end were heaped bones of arms and legs. No implements were found deposited with these remains.

Grave 38. (Fig. 103). Rectangular cist. Length 1.6 m., breadth about 0.5 m., depth 0.3 m. Filled with loose soil. Contained nothing else.

Grave 39. (Fig. 104). Rectangular cist. Length 1.7 m., breadth about 0.5 m., depth 0.55 m. Filled with loose soil to about 0.3 m. from the roof. Contained traces of a skeleton extended on back with head close to the W. end wall.



Grave 40. (Fig. 105). Nearly rectangular cist. Length 1.8 m., breadth at the W. end 0.6 m., at the E. end 0.4 m., depth 0.6 m. Filled with loose soil. Contained:

a. (Pl. 21, Fig. 1). Vase, tripod, small, of a brownish black colour, with two ears. On both sides two rectangular fields with incised, parallel lines. Diam. 6 cm. Height 4 cm.

b. (Pl. 21, Fig. 2). Vessel, tripod, globular; legs lost. On each shoulder a small, degenerate figure of an animal in relief, forming an ear. In the interjacent spaces three vertical, punctate fillets, running from the rim. Colour, reddish brown, now blackened by soot. Broken. Height 7.2 cm. Diam. 9.5 cm.

Grave 41. (Fig. 106). Nearly rectangular cist. Length 1.5 m., breadth at the N. W. end, 0.5 m., depth 0.4 m. Filled with loose soil.

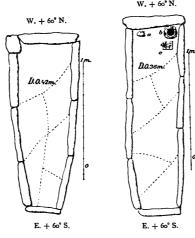


Fig. 106. Grave 41.

Fig. 107. Grave 42.

Grave 42. (Fig. 107). Rectangular cist. Length 1.7 m., breadth 0.45 m., depth 0.36 m. Filled with loose soil. Contained besides fragments (very much decomposed) of a skeleton lying outstretched, also the following objects:

a. (Pl. 21, Fig. 7). Stone figure, human, in a squatting position, with low, flat skull. It represents the flute-playing god, the human figure most frequently found in the graves of the *Guëtares*. Left leg and arm were lost. It was placed in an upright position near to N. W. end wall, 5 cm. from the bottom. Height 11 cm.

b. (Pl. 21, Fig. 10). Tripod vessel, showing on each side a large, wide, face

in relief. Colour, reddish brown, now however; almost black, owing to soot. Height 9 cm. Diam. 12 cm. It was found standing in the N. corner, 33 cm. below the roof.

c. (Pl. 21, Fig. 4). A fragment — possibly a leg of some large vessel — in the shape of an animal between two pillars. Colour, brown. Length 10 cm. Found in the N. corner, 12 cm. below the roof.

Grave 43. (Fig. 108). Oblong cist. Length 1.2 m., breadth 0.5 m., depth 0.6 m. Filled with loose soil. Contained a few scattered pieces of charcoal and the following objects:

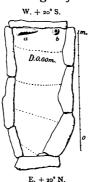


Fig. 108. Grave 43.

a. (Pl. 21, Fig. 12). Stone celt, black, finely shaped, polished to two-thirds of its length. The upper third of the tool, which had been fixed to a handle, is left unpolished and rough. One side of the body has a well-defined ridge, from which a triangular facet runs down to the cutting-edge. The other side is somewhat flatter. The celt is of aphanite. Length 22 cm. It was found in the S. W. corner, 42 cm. below the roof, close to the W. wall.

b. (Pl. 21, Fig. 3). Small black vessel of unusual shape; bottom flat, shoulder sharply defined, neck funnel-like, adorned with an incised zig-zag line; the triangular spaces thereby

formed are filled with punctate markings. Height 6.5 cm. Diam. 6 cm. Found standing in the N. W. corner, 45 cm. below the roof.

Grave 44. (Fig. 109). Oblong cist. Length 1.35 m., breadth at the W. end 0.75 m., at the E. end 0.5 m., depth 0.5 m. Filled with loose soil with scattered fragments of pottery. Contained:

- a. (Pl. 21, Fig. 8). Small, depressed globular vessel with two large ears and a face in relief on each side of the shoulder. Colour, reddish brown, darkened by soot. Height 6 cm. Diam. 8.6 cm. Found in the S. W. corner, 30 cm. below the roof.
- b. (Pl. 21, Fig. 6). Small globular, tripod vase with two small human figures in relief, serving as ears. Decorated with incised lines and punctate markings. The upper, decorated parts of the vessel are painted a dark cin-

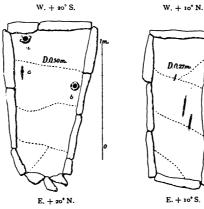


Fig. 109. Grave 44.

Fig. 110. Grave 45.

namon colour, the lower parts and the inside of the mouth have the usual reddish brown paint. Height 8 cm. Diam. 8 cm. Found standing close to the N. wall, 32 cm. below the roof.

c. Red, ochreous paint, found in the soil near the S. wall and close to the bottom.

Grave 45. (Fig. 110). Rectangular cist. Length 1.35 m., breadth about 0.5 m., depth 2.5 m. Filled with loose soil. Contained a few fragments of bones.

Grave 46. Fig. 111). Rectangular cist. Length 1.2 m., breadth 0.5 m., depth 0.24 m. Filled with loose soil. Contained nothing else.

Grave 47. (Fig. 112). Rectangular cist. Length 1.5 m., breadth 0.3 m., depth 0.18 m. Filled with loose soil.

Grave 48. (Fig. 113). Oblong cist. Length 1.75 m., breadth at the W. end 0.55 m., at the E. 0.4 m., depth 0.4 m. Filled with loose soil to 0.9 m. from the roof. Contained:

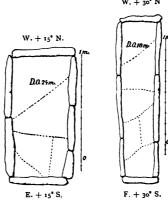


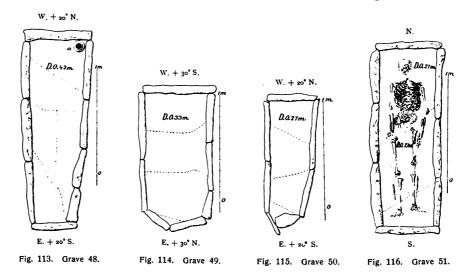
Fig. 111. Grave 46.

Fig. 112 Grave 47.



a. Vessel, globular, without ornaments. Resembles Pl. 21, Fig. 14. Around the base of the rim, however, a system of very fine parallel lines are to be seen, produced possibly with some comb-like instrument, thus showing the effect often caused by turning on potter's wheel. The vessel is blackened by soot. Colour, grayish brown. Broken. It was found in the N. W. corner, 24 cm. below the roof. Height 8 cm. Diam. 11.5 cm.

Grave 49. (Fig. 114). Rectangular cist. Length 1.2 m., breadth about 0.6 m., depth 0.3 m. Filled with loose soil. Contained nothing else.



Grave 50. (Fig. 115). Almost rectangular cist. Length 1.1 m., breadth about 0.4 m., depth 0.27 m. Filled with loose soil but contained nothing else.



Fig. 117. Gra/e 52.

Grave 51. (Fig. 116). Rectangular cist. Length 1.65 m., breadth 0.5 m., depth 0.27 m. Filled with loose soil. Contained fragments of a skeleton extended in direction due N. and S., head to the N.

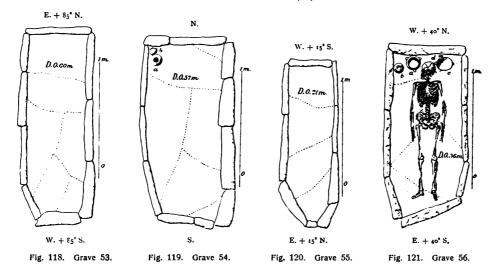
Grave 52. (Fig. 117). Rectangular cist. Length 1.3 m., breadth about 0.5 m., depth 0.33 m. Filled with loose soil. Standing immediately above the roof at the S. W. end of the cist was found:

a. Bowl (resembling Fl. 24, Fig. 10), wide, shallow, tripod. Colour, brick red with partly obliterated white designs on the rim. Broken. Height 10 cm. Diam. 16 cm.

Grave 53 (Fig. 118). Rectangular cist. Length 1.75 m., breadth about 0.55 m., depth 0.6 m. Filled with loose soil.

Grave 54. (Fig. 119). Almost rectangular cist. Length 1.65 m., breadth about 0.7 m., depth 0.57 m. Filled with loose soil to 18 cm. from the roof. Contained:

- a. (Pl. 11, Fig. 14). Globular vessel, very smooth and well-made, with curved rim. Original colour red, now quite blackened by soot. Height 9 cm. Diam. 11.3 cm. Found standing in the N. W. corner, 36 cm. below the roof; it was filled with soil which showed traces of charred corn.
- 6. Globular, pear-shaped vessel, tripod (legs missing), resembling Pl. 44,
  Fig. 2, rim broken off. Colour of the vessel, chocolate brown. Height 7 cm.
  Diam. 8 cm. Found lying in the N. W. corner, 42 cm. below the roof.



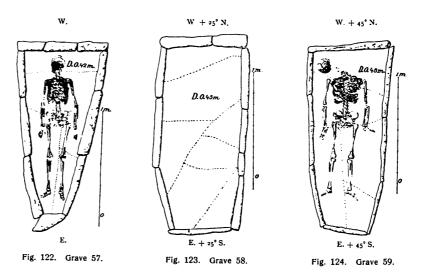
Grave 55. (Fig. 120). Almost rectangular cist. Length 1.45 m., breadth 0.4 m., depth 0.21 m. Filled with loose soil almost to the roof. Scattered fragments of charcoal were found in this soil.

Grave 56. (Fig. 121). Nearly rectangular cist. Length 1.45 m, breadth about 0.7 m., depth 0.36 m. In the middle of the grave, about 15 cm. below the roof, I found a skeleton on its back, head at N. W., face turned to the right. Scattered near the head were found:

a. (Pl. 22, Fig. 1). Tripod bowl with upright walls richly decorated with multicoloured designs, the principal one being an encircling zone of diamond-shaped figures in red and yellow with black central dots. Legs in the shape of puma-

heads. Height 12 cm. Diam. 12.3 cm. Found standing at the right side of the head, 18 cm. below the roof.

- 6. (Pl. 22, Fig. 2). Vase of unusual shape, almost globular, with a sharp equatorial ridge and two handles; the base, annular. The shoulder decorated with triangular fields, bordered with rows of flat pellets, and with a small degenerate animal figure in relief between the handles. Colour, brick red. Height 8.3 cm. Diam. 9 cm. Found turned upside down in the W. corner, 27 cm. below the roof.
- c. (Pl. 22, Fig. 3). Flat, oval stone dish with an animal's head at each end and with four legs. Length from nose to nose 19.5 cm. Height 5.5 cm. Found standing at the left side of the skeleton's head, 25 cm. below the roof.
- d. Flat, oblong polishing-stone. Length 46 cm. Lying on the floor between c and the N. W. end wall.



Grave 57. (Fig. 122). Almost triangular cist. Length 1.55 m., breadth at the W. end 0.7 m., at the E. end 0.25 m., depth 0.42 m. Filled with loose soil. Contained fragments of a skeleton lying outstretched on back with head to the W. and face turned upwards to the right. No implements deposited.

Grave 58. (Fig. 123). Rectangular cist. Length 1.7 m., breadth about 0.7 m., depth 0.45 m. Filled with loose soil.

Grave 59. (Fig. 124). Almost rectangular cist. Length 1.6 m., breadth at the W. end 0.7 m., at the E. end 0.5 m. Filled with loose soil.

Along the middle of the grave a skeleton was extended on back with head towards the N. W. end. The skull was separated from the trunk, lying above the right shoulder. The displacement of the head might have been caused by moles, which had burrowed holes in the ground.

Grave 60. (Fig. 125). Rectangular cist. Length 1.30 m., breadth 0.55 m., depth 0.24 m. Filled with loose soil. Contained:

- a. (Pl. 22, Fig. 8). A rather large, depressed globular vessel, with two small ears; decorated on each side with a small grotesque figure in relief, flanked by two pair of vertical fillets with punctate markings. Colour, red, blackened by soot. Height 9.5 cm. Diam. 15 cm. Broken. Found standing in the N. W. corner on the floor.
- 6. (Pl. 22, Fig. 5). Small depressed vessel with somewhat flattened bottom. On shoulder two small figures in relief, serving as ears; each interjacent space is occupied by a broad human face in low relief. Vessel darkened by soot. Height 6 cm. Diam. 10.5 cm. Found standing in the S. W. corner, 18 cm. below the roof. Contained a few fragments of charred corn-cobs.

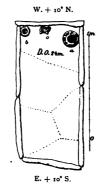


Fig. 125. Grave 60.

c. Broken vase, tripod, with two small handles. Of the same type as Pl. 20, Fig. 1 but with larger eyes and more prominent, upturned snouts. The rim inside is decorated with white lines. Colour, originally reddish brown, now almost blackened by soot. Height 6.5 cm. Diam. 9.5 cm. Found lying close to the W. end wall, 21 cm. below the roof.

Grave 61. (Fig. 126). Rectangular cist. Length 1.7 m., breadth about 0.45 m., depth 0.36 m. Filled with loose soil. Contained:

a. (Pl. 22, Fig. 7). Globular, simple vessel, ornamented only by four small knobs with traces of eyes at the rim; mouth very wide. Colour, reddish brown. Height 5.5 cm. Diam. 8 cm. Found lying in the middle of the grave, 24 cm. below the roof.

A small sewing-needle of bone was found in the soil thrown up from the grave. Length 3 cm.

Grave 62. (Fig. 128). Rectangular cist. Length 1.30 m., breadth about 0.4 m., depth 0.33 m. Filled with loose soil containing potsherds.

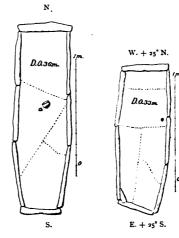


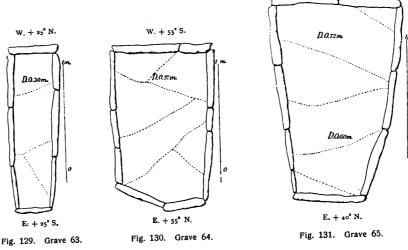
Fig. 126. Grave 61.

Fig. 128. Grave 62

Grave 63. (Fig. 129). Rectangular cist. Length 1.6 m., breadth about 0.35 m., depth 0.3 m. Filled with loose soil.

Grave 64. (Fig. 130). Rectangular cist. Length 1.6 m., breadth about 0.95 m., depth 0.57 m. Filled with loose soil.

W. + 40° S.



Grave 65. (Fig. 131). Cist in the shape of a truncate triangle. Length 1.75 m., breadth at the S. W end 1.1 m., at the N. E. 0.72 m., depth at the S. W. end 0.7 m., at the N. E. end 0.6 m. Filled with loose soil. Contained nothing else.

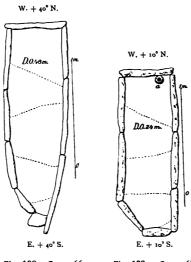


Fig. 132. Grave 66. Fig. 133. Grave 67.

Grave 66. (Fig. 132). Oblong cist. Length 2 m., breadth about 0.65 m., depth 0.48 m. Filled with loose soil.

Grave 67. (Fig. 133). Almost rectangular cist. Length 1.6 m., breadth about 0.55 m., depth 0.24 m. Almost filled with loose soil. Contained:

a. Small, depressed globular, tripod bowl with two small handles on the shoulder. The interjacent spaces decorated with a quadrangular field with linear incisions. The vessel resembles Pl. 37, Fig. 2. Colour, brown. Height 6 cm. Diam. 7.8 cm. The vessel was found standing in the N. W. corner, 18 cm. below the roof.

On the top of the cist at the W. end there was found standing:

b. (Pl. 23, Figs. 1, 2). Bowl, large, hemispherical, tripod, richly decorated with red and black designs on cream-coloured ground. Of the decorative work on the inside of the vessel the two opposite quadrangular fields close to the border, when compared with Pl. 77, Fig. 2 and others, are easily recognized as conventionalized human faces. On the figure mentioned not only eyes, nose and mouth, but also ears are to be seen. The next step of conventionalization we recognize in Pl. 30, Fig. 2, where the ears have been lost and the mouth is transformed into a circle with a dot at the centre. In the face on Pl. 78 Fig. 1, only the eyes and nose are recognizable, but in Pl. 23, Fig. 1, and Pl. 83, Fig. 1, the eyes have disappeared and only rudiments of nose and mouth remain, the last mentioned being in the same shape as on Pl. 30, Fig. 2. It may safely be conjectured that the concentric rings in the centre of the vessel represent the trunk, which is common for the two heads; with regard, on the other hand, to the loop-like ornamentations at the sides, carried out by means of black lines and dots, no reliable explanation can at present be given, by reason of the absence of intermediate forms. — The legs of the bowl are in the shape of a small human figure with two legs. Height 11.7 cm. Diam. 25 cm.

Grave 68. (Fig. 134). Rectangular cist. Length 1.55 m., breadth about 0.7 m., depth 0.54 m. Filled with loose soil almost to the roof.

Grave 69. (Fig. 135). Almost rectangular cist. Length 2 m., breadth

about 0.6 m., depth 0 3 m. Filled with loose soil. Contained a comparatively well-preserved skeleton lying outstretched on back in the middle of the grave, with head to the N. W. and face turned upwards. At a little distance from the head, in the W. corner of the grave, was deposited:

a. (Pl. 22, Fig. 6). Small cup, decorated with a simple row of small impressed circles around the shoulder. Colour, brown. Height 4 cm. Diam. 7 cm. Found upside down in the W. corner, 24 cm. below the roof.

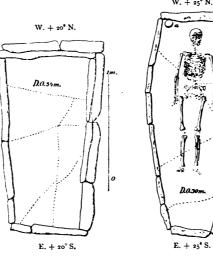
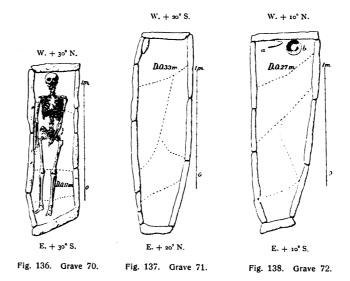


Fig. 135. Grave 69.

Grave 70. (Fig. 136). Almost rectangular cist. Length 1.4 m., breadth about 0.4 m., depth 0.17 m. Filled with loose soil and containing a rather well-preserved skeleton lying outstretched on back, near the S. side wall, the face turned somewhat to the left. Skull in good condition.

No other contents.

Grave 71. (Fig. 137). Almost rectangular cist. Length 1.7 m., breadth about 0.45 m., depth 0.33 m. Filled with loose soil to 12 cm. from the roof.



Grave 72. (Fig. 138). Oblong cist. Length 1.6 m., breadth at the W. end 0.55 m., at the E. end 0.35 m., depth 0.27 m. The E. end broken down. Filled with loose soil. Contained:

- a. (Pl. 24, Fig. 1). Celt, polished, of bluish black aphanite. Length 18 cm. Found lying on the floor, close to the W. end wall.
  - b. (Pl. 24, Fig. 2). Bowl, wide, shallow, tripod. The rim is ornamented



on both sides with incised, linear ornaments. Fig. 139, shows part of the design of the interior, Fig. 140 of the design of the exterior, which is thrice repeated. Each leg is in the shape of a human



Fig. 140. —  $(\frac{1}{2})$ .

face with a flat, elongated chin. Colour, reddish brown. Height 8.3 cm. Diam. 14.3 cm. Found standing close to the W. end wall, 18 cm. below the roof.

c. (Pl. 24, Fig. 8). Small, depressed globular vessel, the shoulder showing on one side a broad face in relief. Colour, bright red. Height 4.5 cm. Diam. 7 cm. Found placed in the above-mentioned bowl and turned upside down.

Grave 73. (Fig. 141). Nearly rectangular cist. Length 1.9 m., breadth at the W. end 0.7 m., at the E. end about 0.4 m., depth 0.39 m. Filled with loose soil. Contained nothing else.

Grave 74. (Fig. 142). Oblong, somewhat irregular cist. The N. side wall broken down. Length 1.45 m., breadth at the W. end 0.6 m., at the E. end 0.8 m., depth 0.41 m. Filled with loose soil.

Grave 75. (Fig. 143). Rectangular cist. Length 1.2 m., breadth 0.6 m., depth 0.45 m. Filled with loose soil. Contained:

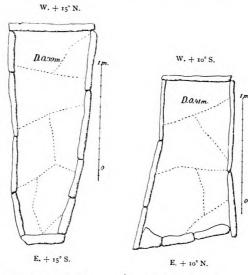


Fig. 141. Grave 73.

Fig. 142. Grave 74.

a. (Pl. 24, Fig. 10). Shallow, tripod, almost flat bowl with curved rim, on the outside ornamented with incised geometrical designs, painted white and

thrice repeated. Colour, reddish brown. Each leg represents a conventionalized animal's head. Height 10 cm. Diam. 16.5 cm. Found standing in the N. W. corner, 21 cm. below the roof.

bottomed, simple vessel of red colour. Height 5 cm. Found in the S. W. corner of the grave, 25 cm. below the roof.

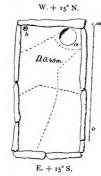


Fig. 143. Grave 75.

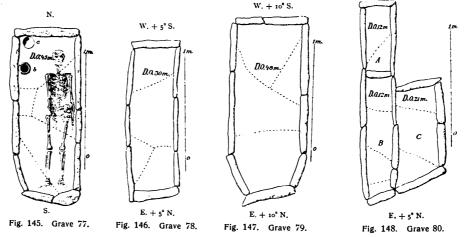


Fig. 144. Grave 76.

Grave 76. (Fig. 144). Almost square cist. Length about 0.75 m., breadth about 0.5 m., depth 0.2 m. Filled with loose soil. Contained, close to the S. side wall, a skeleton lying on back, face upwards and turned a little to the right, both arms crossing the pelvis, and legs doubled up on the left side of the body with the feet almost on a line with the shoulders.

Grave 77. (Fig. 145). Rectangular cist. Length 1.5 m., breadth about 0.55 m., depth 0.45 m. Filled with loose soil. Close to its E. side wall this grave contained a skeleton extended on back, head to the N., and face upwards. Deposited with the body were the following objects:

- a. Polishing-stone. Length 3.5 cm. Found close to the left fore-arm, 12 cm. below the roof.
- b. Hemispherical, tripod vase, resembling Pl. 20, Fig. 5. Colour, reddish brown with white cross lines on shoulder and rim; now almost black with soot. Height 8 cm. Diam. 12.7 cm. Broken. Found standing close to the W. side wall, 20 cm. below the roof, on a line with the shoulders.
- c. (Pl. 22, Fig. 4). Small, hemispherical bowl on annular base. Colour, reddish brown, the base painted white. Height 5.4 cm. Diam. 11 cm. Contained traces of charred corn-cobs. Found standing in the N. W., corner 24 cm. below the roof.  $w. + 5^{\circ} s$ .



Grave 78. (Fig. 146). Almost rectangular cist. Length 1.15 m., breadth 0.4 m., depth 0.3 m. Filled with loose soil.

Grave 79. (Fig. 147). Oblong cist. Length 1.8 m., breadth about 0.75 m., depth 0.48 m. Filled with loose soil. Outside the cist, close to the W. corner, at a level with the roof, there was found a large, broken, shallow, tripod bowl, resembling somewhat Pl. 31, Fig. 1, but without incised designs. The vessel is painted yellowish and adorned with red patches on the walls. Height 11 cm., diam. 21 cm.

Grave 80. (Fig. 148). Complex of three small cists under one roof.

A. Rectangular cist. Length 0.8 m., breadth 0.25 m., depth 0.12 m. Filled with loose soil.

- B. Oblong cist. Length about 1.1 m., breadth 0.25 m., depth 0.12 m. Filled with loose soil, containing a few small pieces of charcoal.
- C. Oblong cist. Length about 0.80 m., breadth about 0.4 m., depth 0.2 m. Filled with loose soil.

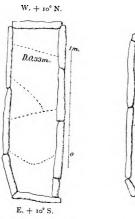


Fig. 149. Grave 81.

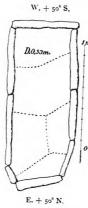


Fig. 150. Grave 82.

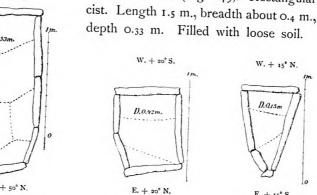
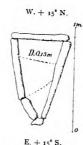


Fig. 151. Grave 83.



Grave 81. (Fig. 149). Rectangular

Fig. 152. Grave 84.

Grave 82. (Fig. 150). Rectangular cist. Length 1.4 m., breadth about 0.55 m., depth 0.53 m. Filled with loose soil.

Grave 83. (Fig. 151). Almost square cist. Length 0.75 m., breadth 0.5 m., depth 0.42 m. Filled with loose soil.

Grave 84. (Fig. 152). Triangular cist. Length 0.75 m., breadth at the base 0.45 m., depth 0.15 m. Filled with loose soil.

Grave 85. (Fig. 153). Oblong cist. Length 1.6 m., breadth about 0.35 m., depth 0.23 m. Filled with loose soil. Contained:

a. (Pl. 24, Fig. 3). Bowl, depressed globular, tripod, with cover. The relief ornaments of the shoulder, and more especially the legs, are much worn by use. The conical cover is roughly made. It was the only one of the kind met with during my excavations in Costa Rica. Colour, reddish brown. Height of vessel 5.5 cm. Diam. 9.5 cm. Height of cover 4.3 cm. Diam. 6.5 cm. The vessel was found standing close to the W. end wall, 18 cm. below the roof.

b. (Pl. 24, Fig. 7). Shallow disc of stone, in the shape of a puma, found standing in the W. corner, 21 cm. below the roof. Height 7 cm. Length 23 cm.

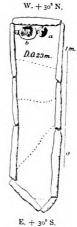


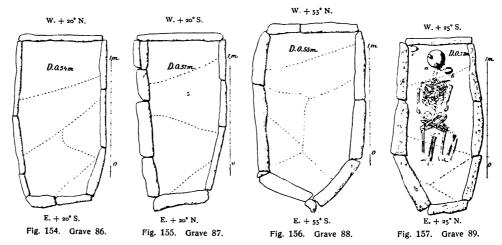
Fig. 153. Grave 85.

Grave 86. (Fig. 154). Almost rectangular cist. Length 1.45 m., breadth about 0.85 m., depth 0.54 m. Filled with loose soil.

Grave 87. (Fig. 155). Oblong cist. Length 1.45 m., breadth at the W. end 0.7 m., at the E. end 0.55 m., depth 0.57 m. Filled with loose soil.

Grave 88. (Fig. 156). Oblong cist. Length 1.45 m., breadth about 0.8 m., depth 0.55 m. Filled with loose soil.

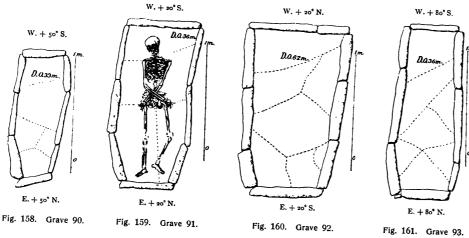
Grave 89. (Fig. 157). Oblong cist. Length 1.5 m., breadth about 0.6 m., depth 0.77 m. Filled with loose soil. Contained, almost in the middle of the grave, a skeleton lying on back with head to the W. The skull separated from the body and placed face upwards; the fore-arms crossing the pelvis; the legs doubled up. Deposited in this grave I found the following objects:



- a. (Pl. 24. Fig. 9). Bowl; almost hemispherical, shallow, tripod, rather large; rim curved outwards; legs large, in the shape of a biped figure, sustaining with its two arms the body of the vessel. Decorated with a thrice repeated design in white, probably representing highly conventionalized figures of animals. Colour, bright red, with rim and legs painted brown. Height 11 cm. Diam. 16 cm. Found turned upside down and covering the skeleton's skull.
- 6. (Pl. 24, Fig. 5). Small, globular, tripod bowl without ornaments, legs worn off by use. Colour, yellowish red, darkened by soot. Height 6 cm. Diam. 8 cm. Found lying close to the head, 21 cm. below the roof.
- c. (Pl. 24, Fig. 4). Human head of stone. The neck is clean cut below, showing plainly that the head has not been accidentally broken off, but purposely shaped thus by the sculptor. Height 10 cm. Found in the W. corner, placed in upright position on the floor.

Grave 90. (Fig. 158). Oblong cist. Length 1.15 m., breadth about 0.4 m., depth 0.33 m. Filled with loose soil.

Grave 91. (Fig. 159). Oblong cist. Length 1.5 m., breadth abouth 0.8 m., depth 0.36 m. Filled with loose soil. Contained, in the middle of the grave, a skeleton in fragmentary condition, lying on its back with head to the W.; the two forearms crossed over the pelvis.



Grave 92. (Fig. 160). Almost rectangular cist. Length 1.4 m., breadth about 0.8 m,, depth 0.62 m. Filled with loose soil to 0.12 m. from the roof.

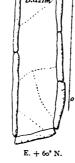
Grave 93. (Fig. 161). Rectangular cist. Length 1.55 m., breadth about 0.5 m., depth 0.36 m. Filled with loose soil containing a great number of small pieces of potsherds of a red colour.

Grave 94. (Fig. 162). Almost square cist. Length 0.6 m., breadth 0.4 m., depth 0.12 m. Filled with loose soil.

Grave 95. (Fig. 163). Rectangular cist. Length 1.45 m., breadth about 0.35 m., depth 0.21 m. Filled with loose soil.

Grave 96. (Fig. 164). Rectangular cist. Length 1.3 m., breadth about 0.81 m., depth 0.33 m. Filled with loose soil. Contained:





W. + 60° S.

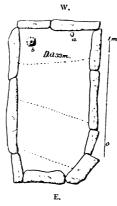


Fig. 162. Grave 94. Fig. 163. Grave 95.

Fig. 164. Grave 96.

a. (Pl. 25, Fig. 2). Polishing-stone, 3 cm. long, found close to the W. end wall, 21 cm. below the roof.



Fig. 165. -(1/2).

b. (Pl. 25, Fig. 1). Vase, tripod, of grotesque shape, a squat, dwarfish human figure. The body of the vessel bulges out into four points, thus making the body almost quadrangular in shape. The head is adorned with a large hat. Both figure and hat of brown colour, richly ornamented with various designs, painted in white. Fig. 165 shows the ornaments inside the crown of the hat. Height 9.3 cm. Breadth over

hips 9.5 cm. Found 25 cm. below the roof, in the S. W. corner.

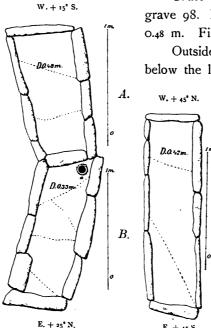


Fig. 166. A. Grave 97. B. Grave 98.

Grave 97. (Fig. 166, A). Oblong cist, joined to grave 98. Length 1.15 m., breadth about 0.5 m., depth 0.48 m. Filled with loose soil.

Outside the cist, close to the S. W. corner, a little below the level of the roof, was found:

A small bowl, depressed globular, tripod, with two ears. Resembles Pl. 33, Fig. 3. Colour, red, blackened by soot. Height 7.8 cm. Diam. 10.5 cm. Broken.

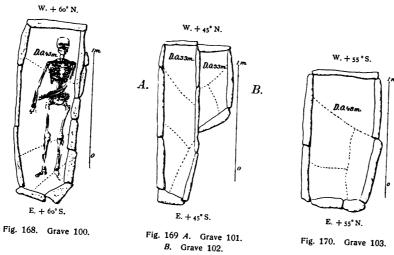
Grave 98. (Fig. 166, B). Oblong cist, joined to grave 97. Length 1.15 m., breadth about 0.25 m., depth 0.33 m. Filled with loose soil. Contained:

a. Tripod vase, resembling Pl. 24, Fig. 9. Four animals' heads, of which two serve as handles, project from the shoulder. The vessel is of red colour, adorned with white cross lines; partly blackened by soot. Height 10 cm. Diam. 12 cm. Broken.

Grave 99. (Fig. 167). Rectangular cist. Length 1.7 m., breadth 0.40 m., depth 0.42 m. Both side walls were broken down and lying in the grave. Contained loose soil.

Fig. 167. Grave 99.

Grave 100. (Fig. 168). Almost rectangular cist. Length 1.55 m., breadth about 0.5 m., depth 0.45 m. Filled with loose soil. Contained a skeleton lying outstretched on back close to the E. side wall, with head to the N. W., the left arm across the abdomen, the right arm straight; face turned upwards, skull well preserved.



Grave 101. (Fig. 169 A). Almost rectangular cist. Length 1.4 m., breadth about 0.3 m., depth 0.33 m. Filled with loose soil.

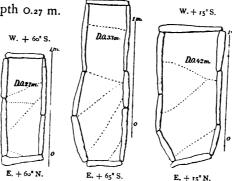
Grave 102. (Fig. 169 B). Small, almost rectangular cist. Length about 0.6 m., breadth about 0.3 m., depth 0.33 m. Filled with loose soil.

Grave 103. (Fig. 170). Almost rectangular cist. Length 1.2 m., breadth about 0.6 m., depth 0.48 m. Filled with loose soil.

Grave 104. (Fig. 171). Rectangular cist. Length 0.95 m., breadth about 0.3 m., depth 0.27 m. Filled with loose soil.

Grave 105. (Fig. 172). Oblong cist. Length 1.5 m., breadth about 0.4 m., depth 0.33 m. Filled with loose soil almost to the roof. Moles had rooted up the interior of this grave.

Grave 106. (Fig. 173). Oblong cist. Length 1.2 m., breadth about 0.5



m., depth 0.42 m. Filled with loose soil. Fig. 171. Grave 104. Fig. 172. Grave 105. Fig. 173. Grave 106.

Grave 107. (Fig. 174). Oblong, irregular cist. Length 1.45 m., breadth about 0.55 m., depth 0.48 m. Filled with loose soil. Contained:

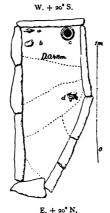
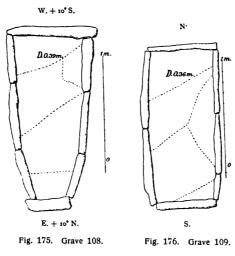


Fig. 174. Grave 107.

- a. (Pl. 25, Fig. 3). Human effigy of stone, half-length from waist up. Hands held against breast. Hair laid in parallel ridges. Height 13.6 cm. Found in an almost upright position close to the S. W. corner, 30 cm. below the roof.
- b. Small, globular vessel, resembling Pl. 21, Fig. 14, decorated only with three small, double knobs on the shoulder. Found lying on its side in the S. W. corner, 24 cm. below the roof. Colour, brown. Height 6.5 cm. Diam. 8.7 cm.
- c. (Pl. 25, Fig. 8). Vessel with hemispherical bottom; two small handles having the shape of grotesque heads; on the shoulder there are two pairs of vertical, punctate fillets, and, between these, two transverse, shorter ones. Colour, red. Height 8.5 cm. Diam. 12 cm. Found standing in the W. corner, 36 cm. below the roof.

d. (Pl. 25, Fig. 4). Tripod vessel in the shape of a cup, with almost vertical walls, slightly bent outwards and decorated with a cross-design painted in yellow, thrice repeated. Legs in the shape of an animal's head. Colour, brick red, legs painted yellow. Height 8.5 cm. Diam. 9.5 cm. Found lying on its side near to the N. wall, 30 cm. below the roof.



Grave 108. (Fig. 175). Almost rectangular cist. Length 1.55 m., breadth at the W. end about 0.75 m., at the E. end about 0.3 m., depth 0.39 m. Filled with loose soil to 9 cm. from the roof.

Grave 109. (Fig. 176). Rectangular cist. Length 1.4 m., breadth about 0.6 m., depth 0.36 m. Filled with loose soil.

Grave 110. (Fig. 177). Almost rectangular cist. Length 1.3 m., breadth about 0.6 m., depth 0.27 m. Filled

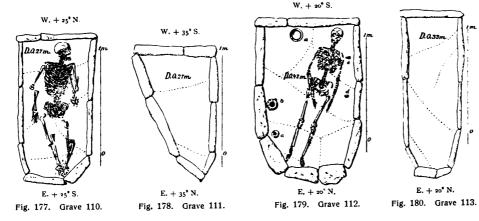
with loose soil. Contained fragments of a skeleton, lying outstretched on back, with head turned to the left.

Grave 111. (Fig. 178). Triangular cist. Length 1.1 m., breadth at the S. W. end 0.7 m., depth 0.27 m. Filled with soil.

Grave 112. (Fig. 179). Almost rectangular cist. Length 1.35 m., breadth 0.85 m., depth 0.42 m. Filled with loose soil. Contained fragments of a skeleton lying outstretched on back. Objects found:

a. (Pl. 25, Fig. 6). Bowl, shallow, tripod, with nearly vertical walls. Colour, red, with a simple design in black, representing a highly conventionalized face, thrice repeated round the outside of the wall. Legs in the shape of an animal's head with a small rudimentary head projecting from the front of it. Height 10 cm. Diam. 13 cm. Found standing close to the S. W. end wall, 30 cm. below the roof.

W. +  $\infty$  S.



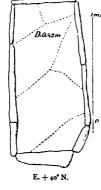
- 6. (Pl. 25, Fig. 10). Bowl, depressed globular, two-eared, with a rudimentary face in relief on each side. Colour, reddish but blackened by soot. Height 7 cm. Diam. 13.3 cm. Found standing close to the S. wall, 25 cm. below the roof.
- c. (Pl. 25, Fig. 5). Small, globular, earless bowl with narrow mouth; on one side a small rudimentary face in relief, close to the rim. Colour, orange. Height 8 cm. Diam. 8 cm. Found standing close to the S. wall, 34 cm. below the roof.
- d. Oblong polishing-stone, 3.5 cm. long. Found close to the N. wall, 24 cm. below the roof.
- e. (Pl. 25, Fig. 9). Small triangular, flattened, greenstone celt. Length 4.8 cm. Found fairly close to the N. wall, 18 cm. below the roof.

Grave 113. (Fig. 180). Almost rectangular cist. Length 1.4 m., breadth about 0.5 m., depth 0.33 m. Filled with loose soil.

Grave 114. (Fig. 181). Almost rectangular cist. Length 1.35 m., breadth about 0.6 m., depth 0.42 m. Filled with loose soil.

Grave 115. (Fig. 182). Almost rectangular cist. Length 0.8 m., breadth about 0.6 m., depth 0.35 m. Filled with loose soil.

Grave 116. (Fig. 183). Almost rectangular cist. Length about 0.9 m., breadth about 0.4 m., depth 0.23 m. Filled with loose soil.



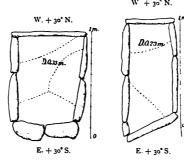


Fig. 181. Grave 114.

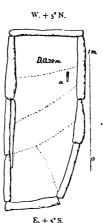
Fig. 182. Grave 115. Fig. 183. Grave 116.

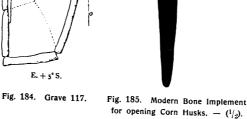
Grave 117. (Fig. 184). Almost rectangular cist. Length 1.5 m., breadth about 0.6 m., depth 0.39 m. Contents:

a. (Pl. 25, Fig. 7). Instrument of bone, with incised linear ornaments. Length 11 cm. Found fairly close to the N. side wall, 30 cm. below the roof.

— Possibly used for opening husks of corn. The owner of the Angelina ranch used a similar instrument (Fig. 185) for this purpose and called it a \*trozador de mays\*. Length 13.3 cm.

Grave 118. (Fig. 186). Rectangular cist. Length 1.6 m., breadth 0.55 m., depth 0.3 m. Filled with loose soil.





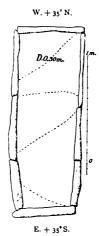
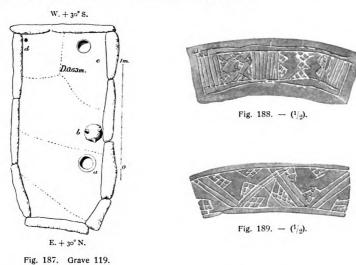


Fig. 186. Grave 118.

Grave 119. (Fig. 187). Almost rectangular cist. Length 1.7 m., breadth about 0.85 m., depth 0.63 m. Filled with loose soil.



a. (Pl. 26, Fig. 4). Bowl, fairly large, shallow, tripod, the outside walls decorated with incised geometrical designs (Fig. 188, 189) on two of its three parti-

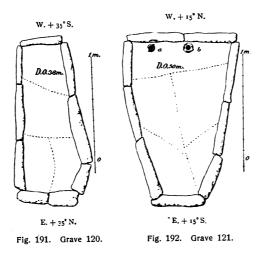
tions. The legs are in the shape of human heads. Colour, blackish. Height 10 cm. Diam. 17.5 cm. Found standing almost on the bottom fairly close to the N. side wall, 50 cm. from the E. end wall.

b. (Pl. 26, Fig. 5). Large bowl, tripod, globular, with high rim, slightly bent outwards, decorated with punctate knobs, probably representing rudiments of faces (mouths?). On the shoulder there are two flute-playing figures in relief (Fig. 190) and two protruding, perforated ears. The intermediate spaces are occupied by ornaments formed by punctate fillets. Legs in the shape of human heads. Colour, brick red.



Height 12 cm. Diam. 16 cm. Found turned upside down, 48 cm. below the roof, close to the N. side wall and half way between the ends of the grave.

- c. (Pl. 27, Fig. 3). Low, hemispherical bowl without any ornament. Colour, red. Height 5.8 cm. Diam. 15.5 cm. Found standing near the N. W. corner, 36 cm. below the roof.
  - d. Red, ochreous paint, found close to the bottom in the S. W. corner.



Grave 120. (Fig. 191). Oblong cist. Length 1.4 m., breadth at the S.W. end about 0.35 m., at the N. E. about 0.5 m., depth 0,36 m. Filled with loose soil.

Grave 121. (Fig. 192). Cist in the shape of a truncated triangle. Length 1.45 m., breadth at the W. end 0.95 m., at the E. 0.4 m., depth 0.5 m. Filled with loose soil. Objects found:

a. Bowl, tripod, nearly globular, with two small perforated ears as in Pl. 20, Fig. 3, which it also resembles in the chequered ornament on the

shoulder. Colour, red. Height 8 cm. Diam. 10 cm. Broken. Found close to the W. end wall.

b. Small, almost globular, tripod vessel of the same type as Pl. 20, Fig. 4. with a human face in low relief on one side and opposite to it a large handle; the intermediate space is decorated with two vertical cords in relief. Colour, reddish brown, now blackened by soot. Height 7 cm. Diam. 9 cm. Broken. Found

standing 18 cm. below the roof, close to the W. end wall.

Outside the cist, 15 cm. below the roof and close to the S. W. corner was



Fig. 193. — (1/2).

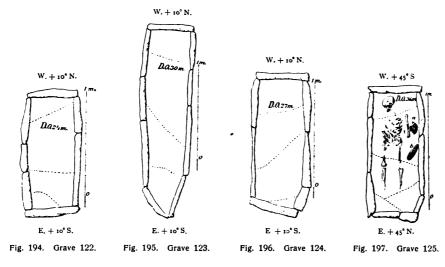
found, leaning against the wall, a large hemispherical bowl (Pl. 26, Fig. 1), with the outside richly decorated with geometrical designs in black and red. (Compare Pl. 28, Fig. 1). The marginal decoration inside is shown by Fig. 193. Height 13 cm. Diam. 26 cm.

Vessels of this type, with very similar ornamentation, are not uncommon in the valley of Cartago.

Grave 122. (Fig. 194). Oblong cist. Length 1.1 m., breadth about 0.4 m., depth 0.24 m. Filled with loose soil.

Grave 123. (Fig. 195). Almost rectangular cist. Length 1.75 m., breadth about 0.4 m., depth 0.3 m. Filled with loose soil.

Grave 124. (Fig. 196). Almost rectangular cist. Length 1.15 m., breadth about 0.45 m., depth 0.27 m. Filled with loose soil.



Grave 125. (Fig. 197). Almost rectangular cist. Length 1.15 m., breadth 0.45 m., depth 0.36 m. Filled with loose soil. Contained fragments of a skeleton, lying outstretched on back. Deposited with the same were the two following objects:

- a. (Pl. 26, Figs. 2, 3). Small vase, in the shape of a turtle, nearly covered with geometrical ornaments (guilloche and zig-zag) in black on a reddish brown ground. Height 8.8 cm. Diam. 12.8 cm. Found lying on one side fairly close to the N. W. side wall, 10 cm. below the roof.
- b. (Pl. 27, Fig 5). Flattened tongue-shaped celt of greenstone. Length 17.5 cm. Found near the N. W. side wall, close to the bottom.

Grave 126. (Fig. 198 A). Almost rectangular cist, joined to grave 127. Length 1.15 m., breadth about 0.35 m., depth 0.42 m. Filled with loose soil.

Grave 127. (Fig. 198 B). Almost rectangular cist, joined to grave 126. Length about 1.3 m., breadth about 0.3 m., depth 0.42 m. Filled with soil.

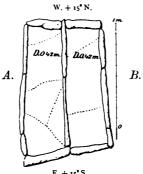


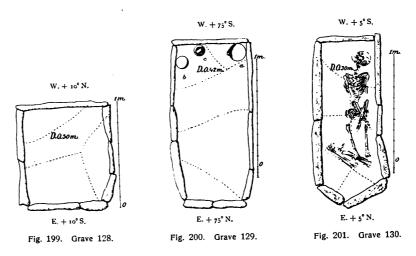
Fig. 198 A. Grave 126.

B. Grave 127.

Grave 128. (Fig. 199). Cist, nearly square. Length 0.5 m., breadth about 0.9 m., depth 0.5 m. Filled with soil.

Grave 129. (Fig. 200). Almost rectangular cist. Length 1.45 m., breadth about 0.6 m., depth 0.42 m. Filled with loose soil. Contents:

a. (Pl. 27, Fig. 9). Bowl, almost hemispherical, tripod, with an animal figure in relief on one side. Colour, brick red. Height 9.5 cm. Diam. 16 cm. Found standing in the W. corner, 25 cm. below the roof.



- b. (Pl. 27, Fig. 4). Plain, shallow bowl, ornamented round the shoulder with a broad, chequered band. Colour, red. Height 6.5 cm. Diam. 11.7 cm. Found overturned close to the S. side wall and near the S. corner, 30 cm. below the roof.
- c. (Pl. 27, Fig. 6). Bowl, wide-mouthed, tripod, spanned by an arched handle, the bases of which are decorated with animal figures in relief; legs very short, two of them lost; colouring disappeared. Height 11 cm. Diam. II cm. Found standing close to the S. W. end wall, 30 cm. below the roof.

Grave 130. (Fig. 201). Almost rectangular cist. Length 1.4 m., breadth about 0.45 m., depth 0.3 m. Filled with loose soil. Contained the fragments of a skeleton lying on back, with legs slightly doubled up.

Outside the cist, 5 cm. from the N. W. corner and 30 cm. below the level of the roof, a large vessel (Pl. 27, Fig. 1) was found standing. The vessel is of unusual shape, cylindrical, on high, annular base, richly adorned with ornaments

incised and in relief. Fig. 202 shows the double row of conventionalized animals' heads and geometrical figurings adorning the outside wall.



Fig. 202. — (1/3).

The base is perforated with four slits. Colour, reddish brown. Height 15 cm. Diam. 19 cm.

Grave 131. (Fig. 203). Almost rectangular cist. Length about 0.8 m., breadth about 0.35 m., depth 0.18 m. Filled with loose soil.

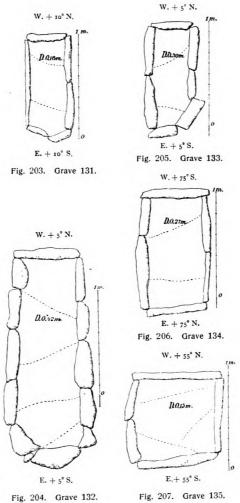
Grave 132. (Fig. 204). Almost rectangular cist. Length 1.8 m., breadth about 0.5 m., depth 0.42 m. Filled with loose soil.

Grave 133. (Fig. 205). Oblong cist. Length about 0.9 m., breadth about 0.5 m., depth 0.3 m. Filled with loose soil.

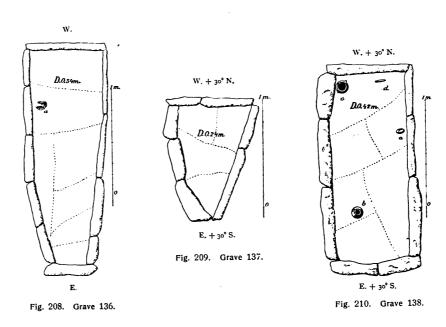
Grave 134. (Fig. 206). Rectangular cist. Length about 1 m., breadth about 0.5 m., depth 0.27 m. Filled with loose soil.

Grave 135. (Fig. 207). Almost square cist. The sides about 0.7 m. Depth 0.15 m. Filled with loose soil.

Grave 136. (Fig. 208). Oblong cist. Length 2.1 m., breadth at the W. end 0.7 m., at the E. end 0.45 m., depth 0.54 m. Filled with loose soil. Contained:



a. Fragments of a tripod vessel with two ears, nearly similar to Pl. 25, Fig. 8, but having on one side a grotesque relief figure between the vertical fillets. Colour, reddish brown, now darkened by soot. Height about 7 cm. Diam. 11 cm. Found lying on its side, 45 cm. below the roof, close to the S. side wall and 50 cm. from the W. end wall.



Grave 137. (Fig. 209). Triangular cist. Length 1 m., breadth at the N. W. end 0.7 m., depth 0.24 m. Filled with loose soil.

Grave 138. (Fig. 210). Rectangular cist. Length 1.75 m., breadth 0.7 m., depth 0.42 m. Filled with loose soil. Contents:

- a. Small, depressed globular bowl with wide mouth, resembling in shape Pl. 64, Fig. 8, but without legs and ornaments. Colour, reddish, darkened by soot. Height 4 cm. Diam. 7.8 cm. Found lying on its side close to the N. side wall, 55 cm. from the W. end wall and 24 cm. below the roof.
- b. Bowl, small, tripod, with small human figures in relief as ears and a rudimentary face on each side. Resembles Pl. 39, Fig. 1. Colour, reddish brown, now much blackened by soot. Height 7.5 cm. Diam. 9 cm. Broken. Found standing 36 cm. below the roof, 18 cm. from the S. side wall and 40 cm. from the E. end wall.

<u>Oli kalangan kantan dari birkan birk</u>

c. (Fig. 211). Rather large, nearly globular, tripod vessel with two carelessly modelled quadrupeds as ears and a conventionalized animal's face

on each side at the rim; legs in the shape of small human figures. Colour, reddish with criss cross lines painted white both on the shoulder and inside the rim. Height 11.3 cm. Diam. 14.5 cm. Found standing in the W. corner, 30 cm. below the roof.

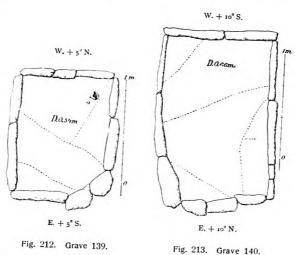
d. (Pl. 27, Fig. 7). Celt, of greenstone, well polished, in the form of a spool; edge straight, sharpened from both sides. Length 9 cm. Found 30 cm. below the roof, fairly close to the W. end wall and 20 cm. from the N. side wall.



Fig. 211. -(2/3).

Grave 139. (Fig. 212). Cist, approximately square. Length about 1.1 m., breadth about 0.8 m., depth 0.54 m. Filled with loose soil to 14 cm. from the roof. Contained:

a. Small, tripod vessel, resembling in shape Pl. 37, Fig. 2, but without upright rim; ears probably rudimentary animal figures; on each side of the shoulder is a quadrangular panel with incised, linear ornaments, somewhat resembling a saltier-cross. Colour, reddish. Broken, fragmentary. Height 7 cm. Diam. 8 cm. Found 36 cm. below the roof, 20 cm. from the N. W. corner.



Grave 140. (Fig. 213). Rectangular cist. Length 1.5 m., breadth 0.95 m., depth 0.66 m. Filled with loose soil.

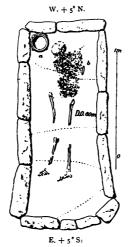


Fig. 214. Grave 141.

Grave 141. (Fig. 214). Almost rectangular cist. Length 1.75 m., breadth 0.6 m., depth 0.6 m. Filled with loose soil. Contained a badly decomposed skeleton, lying on its back and two other objects, viz.:

- a. (Pl. 27, Fig. 2). Large, tripod, two-eared vessel, decorated on each side with an animal's head and two forefeet in relief. Colour, red. Height 12 cm. Diam. 18 cm. Found standing in the S. W. corner, 45 cm. below the roof.
- b. (Pl. 27, Fig. 8). Celt of greenstone, in the form of a somewhat flattened spool; the edge sharpened from one side only, curved. Length 7.7 cm. Found close to the left humerus, 24 cm. below the roof.

Grave 142. (Fig. 215). Rectangular cist. Length 1.3 m., breadth about 0.65 m., depth 0.27 m. Filled with loose soil. Contained fragments of a skeleton lying diagonally in the cist, outstretched on back. With the skeleton the following objects were found:

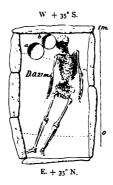


Fig. 215. Grave 142.



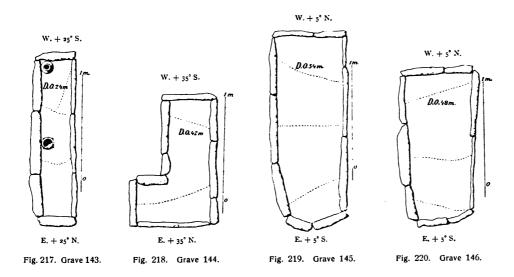
Fig. 216. — (1/2).

- a. (Pl. 28, Figs. 1, 2). Bowl with nearly upright walls, slightly curved outwards at top. Outside decorated with black and red designs in the same style as Pl. 26, Fig. 1, on reddish yellow ground. The outside of the bottom also richly decorated. Height 9.5 cm. Diam. 18.3 cm. Found standing near the S. W. corner of the grave, 20 cm. below the roof.
- b. (Fig. 216). Almost hemispherical, tripod bowl, with legs in the shape of an animal's head with prominent snout. Colour, red. Outside walls decorated with a simple linear ornament in yellow, thrice repeated. Height 7.3 cm. Diam.

14 cm. Found between the bowl a and the head of the skeleton, 18 cm. below the roof.

Grave 143. (Fig. 217). Rectangular cist. Length 1.47 m., breadth about 0.3 m., depth 0.24 m. Filled with loose soil. Contents:

- a. (Pl. 28, Fig. 7). Vessel with round bottom and very narrow mouth; the rim comparatively high, funnel-shaped. No ornaments. Colour, brick red. Height 10 cm. Diam. 11.5 cm. Found standing in the S. W. corner, 18 cm. below the roof.
- b. (Pl. 38, Fig. 9). Small, hemispherical bowl with annular base and two small ears; on each side a rudimentary animal face in relief. The inside of the rim is ornamented with groups of transverse lines, painted white. Original colour, reddish brown, now blackened by soot. Height 8 cm. Diam. 11.3 cm. Found standing 21 cm. below the roof, close to the middle of the S. side wall.



Grave 144. (Fig. 218). Cist of rather unusual shape. Length 1.15 m., breadth at the S. W. end 0.4 m., at the N. E. 0.7 m., depth 0.42 m. Filled with loose soil.

Grave 145. (Fig. 219). Rectangular cist. Length 1.7 m., breadth about 0.6 m., depth 0.54 m. Filled with loose soil.

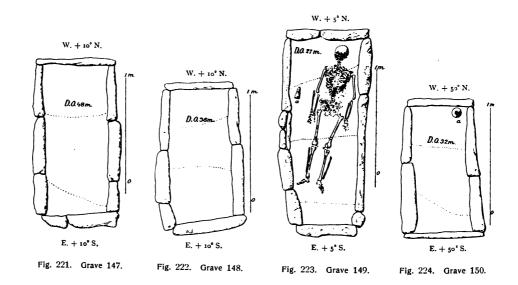
Grave 146. (Fig. 220). Rectangular cist. Length 1.35 m., breadth about 0.7 m., depth 0.48 m. Filled with loose soil.

Grave 147. (Fig. 221). Rectangular cist. Length 1.4 m., breadth 0.6 m., depth 0.48 m. Filled with loose soil.

Grave 148. (Fig. 222). Rectangular cist. Length 1.2 m., breadth about 0.6 m., depth 0.36 m. Filled with loose soil.

Grave 149. (Fig. 223). Rectangular cist. Length 1.75 m., breadth about 0.6 m., depth 0.27 m. Filled with loose soil. Contained fragments of a skeleton lying outstretched on back. Deposited at its right side was found:

a. (Pl. 28, Fig. 5). Celt of chalcedony. Length 11 cm. Found fairly close to the S. side wall, 8 cm. below the roof.



Grave 150. (Fig. 224). Rectangular cist. Length 1.2 m., breadth about 0.5 m., depth 0.32 m. Filled with loose soil. Contained:

a. (Pl. 30, Fig. 5). Almost globular vessel with conical upper half and very narrow mouth; rim lost. On one side, near the top, a rudimentary human face in low relief. Colour brick red with two meandroid bands in white paint, the broadest one, around the middle, containing the characteristic step-pattern, the other, which crosses the face, being of a simpler construction. Height 8.8 cm. Diam. 9.5 cm. — Found 24 cm. below the roof, in the N. corner.

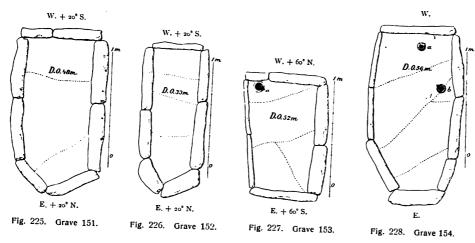
Grave 151. (Fig. 225). Almost rectangular cist. Length 1.3 m., breadth about 0.6 m., depth 0.48 m. Filled with loose soil.

Grave 152. (Fig. 226). Almost rectangular cist. Length 1.2 m., breadth about 0.4 m., depth 0.33 m. Filled with loose soil.

Grave 153. (Fig. 227). Almost rectangular cist. Length 1 m., breadth about 0.55 m., depth 0.52 m. Filled with loose soil. Contained:

a. Small, tripod vessel with two ears, resembling in shape Pl. 20, Fig. 5, and having a small animal's head and rudiments of two fore-feet on each side. Colour, brick red with criss cross lines painted white almost all over. Height 7 cm. Diam. 10.5 cm. Broken. Found standing in the W. corner, 15 cm. below the roof.

Outside the cist, close to the N. corner, was found a large, tripod bowl, resembling in shape Pl. 24, Fig. 2, with legs resembling those of Pl. 50, Fig. 8. Colour, brick red. No ornaments. Height 10.7 cm. Diam. 23.5 cm. Broken. Found overturned, 30 cm. below the roof, at 6 cm. distance from the N. corner.



Grave 154. (Fig. 228). Oblong cist. Length 1.5 m., breadth about 0.65 m., depth 0.56 m. Filled with loose soil. Contents:

a. (Pl. 28, Fig. 3 and also Fig. 229 in the text). Small, slightly depressed globular vessel with a handle on one side and a face with prominent snout on the opposite; the inside of the rim is painted with white, transverse lines; the vessel brick red, outside almost covered with criss cross lines painted white, but partially obliterated. Height 6 cm.

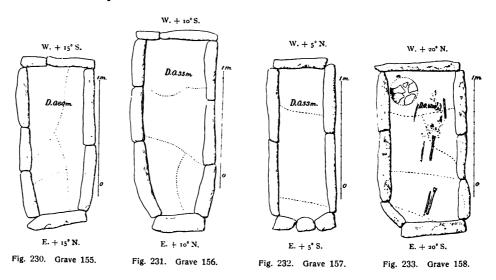


Diam. 8.5 cm. Found standing 18 cm. below the roof, fairly close to the W. end wall.

6. (Pl. 28, Fig. 4). Almost globular vessel with a handle on one side and the body af a small animal in relief opposite; colour, reddish brown. Height 7 cm. Diam. 8.2 cm. Found standing 27 cm. below the roof, fairly close to the middle of the N. side wall.

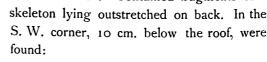
Grave 155. (Fig. 230). Nearly rectangular cist. Length 1.35 m., breadth about 0.5 m., depth 0.6 m. Filled with loose soil.

Grave 156. (Fig. 231). Almost rectangular cist. Length 1.65 m., breadth about 0.8 m., depth 0.35 m. Filled with loose soil.



Grave 157. (Fig. 232). Rectangular cist. Length 1.4 m., breadth about 0.4 m., depth 0.53 m. Filled with loose soil.

Grave 158. (Fig. 233). Almost rectangular cist. Length 1.4 m., breadth about 0.45 m., depth 0.47 m. Filled with loose soil. Contained fragments of a



a. Fragments of a large, wide, tripod bowl, resembling in shape Pl. 73, Fig. 1, outside decorated with an incised ornament (Fig. 234); legs in the shape of animals'



Fig. 234. — (1/2)

heads with a protuberance in front between the transverse eye-slits. Colour blackish. Height 14.5 cm. Diam. about 22.5 cm.

Grave 159. (Fig. 235). Nearly rectangular cist. Length 1.5 m., breadth about 0.7 m., depth 0.35 m. Filled with loose soil. Contained fragments of a skeleton lying outstretched on back. Deposited with the same was:

a. (Pl. 28, Fig. 8). Small, low bowl with wide mouth, decorated on the outside with a meandroid band in white paint (Fig. 236) on reddish ground. Height 3 cm. Diam. 6.5 cm. Found standing 12 cm. below the roof and close to the left side of the skeleton.

Grave 160. (Fig. 237). Small, rectangular cist. Length about 1 m., breadth 0.55 m., depth 0.15 m. Filled with loose soil. Contained fragments of two skeletons, bones heaped together.

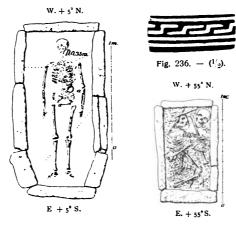


Fig. 235. Grave 159.

Fig. 237. Grave 160.

Grave 161. (Fig. 238). Rectangular cist. Length 1.5 m., breadth about 0.5 m., depth 0.39 m. Filled with loose soil.

Grave 162. (Fig. 239). Oblong cist. Length about 1.5 m., breadth 0.35 m., depth 0.3 m. Filled with loose soil. Contained:

a. Small, depressed globular vessel, somewhat resembling Pl. 22, Fig. 8, but without the grotesque figure between the vertical fillets; the ears are broad and grooved. Colour, reddish brown. Height 6.5 cm. Diam. 9.5 cm. Found standing 27 cm. below the roof in the S. corner.

Grave 163. (Fig. 240 A). Rectangular cist. Length 0.9 m., breadth about 0.3 m., depth 0.27 m. Filled with loose soil.

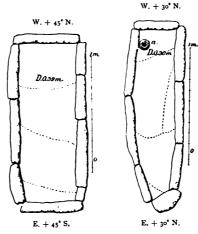
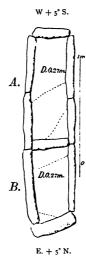


Fig. 238. Grave 161.

Fig. 239. Grave 162.

Outside the cist, 8 cm. from the W. end wall and 10 cm. below the roof was found:

A large hemispherical, tripod bowl (Pl. 29, Figs. 1, 2) of a cream colour, richly adorned inside with highly conventionalized designs in black, red, brown and orange, representing at the centre two heads, each with two arms, connected by a rudimentary body. The wall decoration is divided into three panels, each



containing a very conventionalized head with two arms; the panels are separated by rectangular fields with criss-cross lines over their surface. The outside decoration is a simple geometrical one. The legs of the bowl are in the shape of conventionalized human figures. Height 12.6 cm. Diam. 26 cm.

The decorative central designs inside this bowl belong to a series of conventionalized human figures. The series begins with the comparatively realistic effigy on Pl. 87, Fig. 1, the next step is represented by the bowl now in question, and the following ones are easily to be recognized in Pl. 29.1, Text Fig. 286, p. 128, Pl. 81.1 and Pl. 36.1. — The wall decoration belongs to another evolutional series, of which Fig. 281, p. 127, may be considered a prototype. Further varieties may be seen in Text Fig. 286, p. 128, and in Plates 36, 81, 87, 29 and 82.

Fig. 240 A. Grave 163. Grave 164. (Fig. 240 B). Oblong cist. Length about B. Grave 164. O.6 m., breadth about 0.32 m., depth 0.25 m. Filled with loose soil.

Grave 165. (Fig. 241). Nearly rectangular cist. Length about 1.55 m., breadth about 0.65 m., depth 0.27 m. Filled with loose soil.

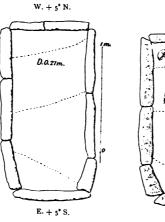


Fig. 241. Grave 165.

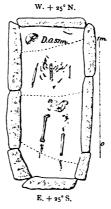


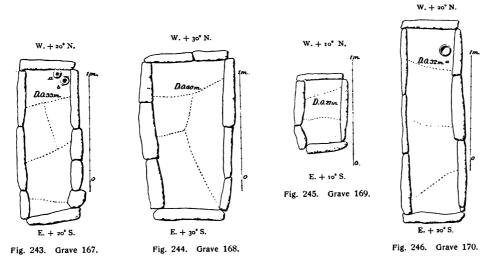
Fig. 242. Grave 166.

Grave 166. (Fig. 242). Almost rectangular cist. Length 1.45 m., breadth about 0.8 m., depth 0.57 m. Filled with loose soil. Contained fragments of a skeleton lying outstretched on back. Deposited with the same was:

a. (Pl. 28, Fig. 6). Celt of finely polished aphanite, with sharp sides and convex faces, somewhat flattened along the middle. Black. Length 11.7 cm. Found lying close to the N. W. end wall, 30 cm. below the roof.

Grave 167. (Fig. 243). Rectangular cist. Length about 1.35 m., breadth about 0.45 m., depth 0.33 m. Filled with loose soil to 21 cm. from the roof. Contained:

- a. Small, depressed globular bowl; without any ornaments. Resembles Pl. 21, Fig. 14. Colour, black. Height 5.8 cm. Diam. 8.4 cm. Found standing in the N. W. corner, 4 cm. below the roof.
- b. Small, depressed globular, tripod vessel with a face in relief on one side and a handle on the other. The shoulder is ornamented with four sets of parallel, incised, vertical lines enclosing a zig-zag. Very like Fig. 229 in the text, but has been provided with three feet, now lost. Colour, reddish but partly blackened; traces of white criss-cross lines. Height 5.8 cm. Diam. 8 cm. Found standing in the N. W. corner, 15 cm. below the roof and close to a.



Grave 168. (Fig. 244). Almost rectangular cist. Length about 1.4 m., breadth about 0.6 m., depth 0.6 m. Filled with loose soil.

Grave 169. (Fig. 245). Rectangular cist. Length 0.6 m., breadth about 0.5 m., depth 0.27 m. Filled with loose soil.

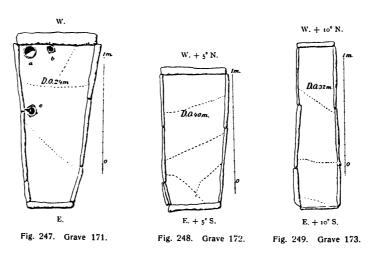
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Grave 170. (Fig. 246). Rectangular cist. Length about 1.75 m., breadth about 0.4 m., depth 0.32 m. Filled with loose soil. Contents:

a. Shallow, plain bowl with walls curved somewhat inwards. Resembles Pl. 27, Fig. 3. Colour, red. Height 5.5 cm. Diam. 12 cm. Broken. Found standing fairly close to the N. W. corner, 18 cm. below the roof.

Grave 171. (Fig. 247). Oblong cist. Length 1.45 m., breadth at the W. end 0.7 m., at the E. 0.4 m., depth 0.24 m. Filled with loose soil. Contained:

- a. (Pl. 30, Fig. 7). Shallow bowl with the walls somewhat curved inwards: the outside almost covered with incised, geometrical designs. Colour, red. Height 6 cm. Diam. 13 cm. Found standing in the S. W. corner on the floor of the grave.
- 6. Small, hemispherical, tripod bowl with almost horizontal rim and two ears on the shoulder; in the interjacent spaces are animals' heads in relief. Resembles Pl. 20, Fig. 6. Colour, light brick red. Height 5.8 cm. Diam. 7.5 cm. Found standing close to the middle of the W. end wall, 15 cm. below the roof.
- c. (Pl. 30, Fig. 6). Two-eared bowl with wide mouth and annular base; on one side an animal's head in relief, supported by the two arms, which extend from the annular base; on the other side a short tail. Colour, red. The upper part of the body and the rim are decorated with white criss-cross lines. Height 6.3 cm. Diam. 10 cm. Found standing close to the middle of the S. wall, 15 cm. below the roof.



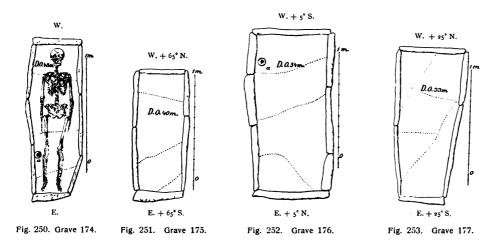
Grave 172. (Fig. 248). Rectangular cist. Length 1.2 m., breadth about 0.6 m., depth 0.4 m. Filled with loose soil.

Grave 173. (Fig. 249). Rectangular cist. Length 1.5 m., breadth about 0.3 m., depth 0.32 m. Filled with loose soil. Outside the cist, close to the W. end wall and at a level with the roof, was found a hemispherical, tripod bowl (Pl. 30, Figs. 1, 2) of a reddish yellow colour, adorned on the outside with bands in black and red of varying breadth. The bowl is decorated inside with two human

faces and with linear designs in black and red, probably representing the common body and the extremities. Height 10.1 cm. Diam. 18.8 cm. — Compare Plates 77.2, 30.2, 78.1, 23.1 and 83.1.

Grave 174. (Fig. 250). Oblong cist. Length 1.45 m., breadth about 0.4 m., depth 0.48 m. Filled with loose soil. Contained fragments of a skeleton lying outstretched on back. With this was found, turned upside down and at 35 cm. below the roof:

a. (Pl. 30, Fig. 4). Small, globular bowl with very narrow neck and mouth; adorned on one side with a human face in relief on shoulder. Colour, reddish brown. Height 6 cm. Diam. 6.5 cm. Found deposited close to the S. side wall near the right knee of the skeleton, 30 cm. below the roof.



Grave 175. (Fig. 251). Rectangular cist. Length 1.1 m., breadth 0.45 m., depth 0.4 m. Filled with loose soil.

Grave 176. (Fig. 252). Rectangular cist. Length 1.45 m., breadth 0.65 m., depth 0.54 m. Filled with loose soil. Contained:

a. Small bowl, depressed globular, tripod, two-eared, of the same type as Pl. 20, Fig. 3; with incised chequer designs on each side of the shoulder. Colour, dark brown. Height 5.3 cm. Diam. 8 cm. Broken. The vessel contained charred corn and was found lying fairly close to the S. side wall, 35 cm. from the W. end wall and 36 cm. below the roof.

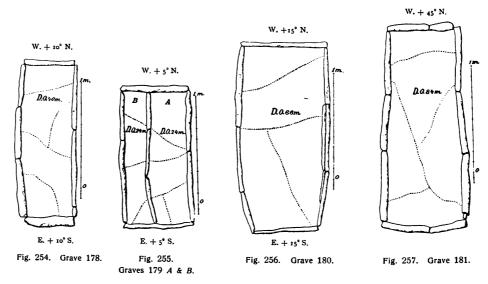
Grave 177. (Fig. 253). Oblong cist. Length 1.4 m., breadth at the W. end 0.6 m., at the E. 0.4 m., depth 0.35 m. Filled with loose soil.

Grave 178. (Fig. 254). Rectangular cist. Length 1.45 m., breadth about 0.45 m., depth 0.4 m. Filled with loose soil.

Grave 179 A. (Fig. 255). Rectangular cist, joined to Grave 179 B under a common roof. Length 1.25 m., breadth about 0.35 m., depth 0.24 m. Filled with loose soil.

Outside the cist, close to the W. end wall and 15 cm. below the level of the roof there was found a small vessel (Pl. 30, Fig. 3) with rounded bottom and a handle on one side; on the opposite side an animal's head etc. in relief. Colour, a yellowish. Height 5.8 cm. Diam. 6.8 cm.

Grave 179 B. (Fig. 255). Rectangular cist, under a common roof with Grave 179 A. Length 1.25 m., breadth about 0.25 m., depth 0.24 m. Filled with loose soil.

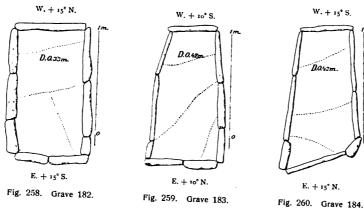


Grave 180. (Fig. 256). Almost rectangular cist. Length about 1.7 m., breadth about 0.75 m., depth 0.66 m. Filled with loose soil.

Grave 181. (Fig. 257). Oblong cist. Length about 1.8 m., breadth about 0.6 m., depth 0.84 m. Filled with loose soil.

Grave 182. (Fig. 258). Rectangular cist. Length 1.2 m., breadth 0.6 m., depth 0.33 m. Outside the cist, 20 cm. below the level of the roof and close to the W. corner there was found: a fairly large bowl (Pl. 33, Fig. 3), depressed

globular in shape, tripod, with two ears on the rim; on each side of the shoulder there is a broad face in low relief, with a prominent snout; upper part of the vessel is decorated with white criss-cross lines. Colour, brick red. Both faces are painted a cinnamon colour. Height 9 cm. Diam. 13 cm.



Grave 183. (Fig. 259). Oblong cist. Length 1.2 m., breadth at the W. end 0.45 m., at the E 0.6 m., depth 0.42 m. Filled with loose soil.

Grave 184. (Fig. 260). Oblong cist. Length about 1.2 m., breadth about 0.6 m., depth 0.42 m. Filled with loose soil.

Grave 185. (Fig. 261). Oblong cist of irregular shape, broadened at the S. E. end. Length 1.55 m., breadth at the N. W. end 0.4 m., at the S. E. end 0.75 m., depth 0.38 m. Filled with loose soil. Contained fragments of two skeletons. The one to the right was lying outstretched leaning on its left shoulder, the

arms doubled upwards. The other lay on back, the legs somewhat bent, arms crossed over pelvis. Almost immediately above the head of the latter and 24 cm. below the roof was found:

a. (Pl. 33, Fig. 4). Small bowl, depressed globular, tripod, with two small perforated animals' heads as ears on shoulder; legs slightly curved inwards. Colour, reddish yellow. Height 6.5 cm. Diam. 9.5 cm. Found standing above the head of the skeleton on the left, 25 cm. below the roof.

Grave 186. (Fig. 262). Almost rectangular cist. Length 1.25 m., breadth 0.55 m., depth 0.38 m. Filled with loose soil.

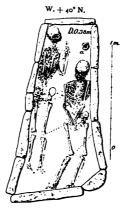
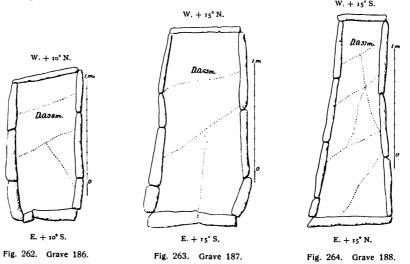


Fig. 261. Grave 185.

Grave 187. (Fig. 263). Oblong cist. Length 1.7 m., breadth about 0.7 m., depth 0.65 m. Filled with loose soil.

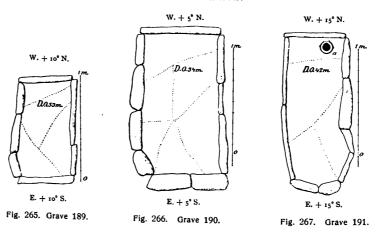
Grave 188. (Fig. 264). Oblong cist. Length 1.85 m., breadth at the W. end 0.4 m., at the E. end 0.6 m., depth 0.57 m. Filled with loose soil.

Grave 189. (Fig. 265). Nearly rectangular cist. Length 0.9 m., breadth 0.45 m., depth 0.53 m. Filled with loose soil.



Grave 190. (Fig. 266). Rectangular cist. Length 1.3 m., breadth 0.7 m., depth 0.54 m. Filled with loose soil.

Grave 191. (Fig. 267). Oblong cist. Length 1.35 m., breadth about 0.5 m., depth 0.42 m. Filled with loose soil. Contained:



a. (Pl. 33, Fig. 5). Depressed globular, tripod bowl with a wide mouth and with two small ears on the shoulder; on one side is a small, roughly modelled head and two arms holding what is probably a flute (Compare Fig. 190, p. 101 in the text); on the opposite side only a small knob; the legs in the shape of small human (?) figures. Colour, red but blackened by soot. Height 7 cm. Diam. 11.7 cm. Found standing in the N. W. corner, 36 cm. below the roof.

Grave 192. (Fig. 268). Rectangular cist. Length 1.7 m, breadth 0.6 m., depth 0.46 m. Filled with loose soil. Contained:

a. (Pl. 33, Fig. 2). Small, globular vessel with wide mouth; on each side a relief ornament like a detached animal's limb between two vertical, punctate fillets. Colour, red but blackened by soot. Height 6.5 cm. Diam. 9 cm. Found standing in the N. W. corner, 10 cm. below the roof.

Outside the cist, but close to the N. W. end and at 25 cm. below the level of the roof was found a large, shallow, tripod bowl (Pl. 31, Figs. 1, 2) with a prominent jaguar head on one side. The whole vessel is decorated with designs in black, red and brown on a drab ground. Around the outside runs a broad band with shaped and other ornaments. The inside of the bowl is decorated at

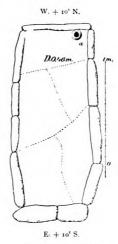


Fig. 268. Grave 192.

the bottom with a conventionalized quadruped (only one fore-leg and one hind-leg are figured); it has a long snout, a curling projection on the neck, and a long tail. The wall ornamention is divided into four panels; in two opposite ones there is the same same same same as on the outside — representing, as seen on

other specimens, a two-headed, highly conventionalized bird (?) — the other ones are filled with designs that evidently are imitative of the spots on the jaguar's skin. Height 12.3 cm. Diam. 26.1 cm.

Grave 193. (Fig. 269). Rectangular cist. Length 1.35 m., breadth about 0.65 cm., depth 0.33 m. Filled with loose soil.

Grave 194. (Fig. 270). Rectangular cist. Length 1.35 m., breadth 0.5 m., depth 0.35 m. Filled with loose soil.

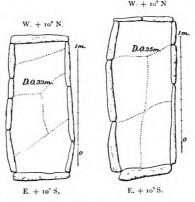
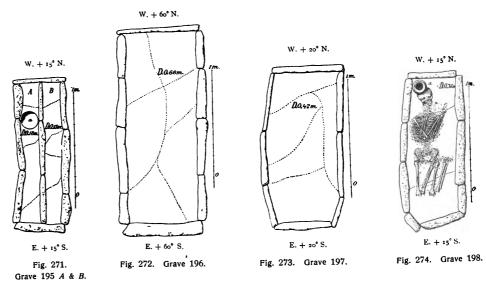


Fig. 269. Grave 192. Fig. 270. Grave 194.

Grave 195 A. (Fig. 271 A). Oblong cist. Length 1.35 m., breadth about 0.25 m., depth 0.18 m. Filled with loose soil. Contained:

a. (Pl. 32, Figs. 1, 2). Large, hemispherical, tripod bowl, richly decorated with designs in reddish brown and black on cream-coloured ground. The inside decoration shows two triangular faces and two pairs of arms, the whole forming a cross. (Compare Pl. 56, Fig. 2, which shows a related representation on a bowl found at Orosi). Legs conventionalized animals' heads. Height 13.3 cm. Diam. 22.4 cm. Found deposited 25 cm. from the W. end wall and 5 cm. below the roof.

Grave 195 B. (Fig. 271 B). Oblong cist. Length 1.35 m., breadth about 0.25 m., depth 0.15 m. Filled with loose soil.



Grave 196. (Fig. 272). Rectangular cist. Length 1.8 m., breadth 0.65 m., depth 0.66 m. Filled with loose soil.

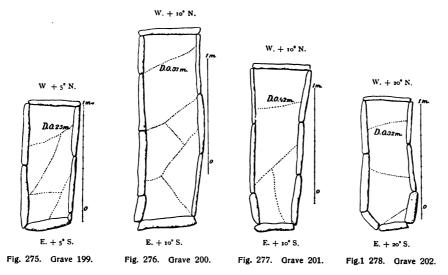
Grave 197. (Fig. 273). Oblong cist. Length 1.4 m., breadth about 0.6 m., depth 0.42 m. Filled with loose soil.

Grave 198. (Fig. 274). Almost rectangular cist. Length about 1.3 m., breadth 0.45 m., depth 0.36 m. Filled with loose soil. Contained fragments of a skeleton lying on back with legs doubled up, arms crossed and face turned upwards. In the S. W. corner, close up to the head and 20 cm. below the roof, was found:

a. (Pl. 33, Fig. 7). Bowl, large, nearly globular, tripod, with wide mouth and two ears. Legs very short. Brown in colour, with white criss-cross lines now almost obliterated; darkened by soot. Height 12.5 cm. Diam. 13.7 cm.

Grave 199. (Fig. 275). Rectangular .cist. Length about 1.1 m., breadth 0.45 m., depth 0.25 m. Filled with loose soil.

Grave 200. (Fig. 276). Rectangular cist. Length 1.65 m., breadth 0.5 m., depth 0.37 m. Filled with loose soil.



Grave 201. (Fig. 277). Oblong cist. Length 1.25 m., breadth about 0.45 m., depth 0.42 m. Filled with loose soil.

Grave 202. (Fig. 278). Oblong cist. Length 1.2 m., breadth about 0.4 m., depth 0.32 m. Filled with loose soil.

Grave 203. (Fig. 279). Composed of four small compartments under a common roof.

- A. Rectangular cist. Length 0.5 m., breadth about 0.35 m., depth 0.12 m. Filled with loose soil.
- B. Rectangular cist. Length 0.45 m., breadth about 0.3 m., depth 0.9 m. Filled with loose soil.
- C. Rectangular cist. Length 0.45 m., breadth 0.35 m., depth 0.18 m. Filled with loose soil. Contained:
- a. (Pl. 33, Fig. 1). Small, hemispherical, tripod vessel with high arched handle, the latter with a small animal's head in relief at each end. On each side is a small quadrang-

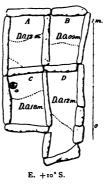


Fig. 279. Grave 203.

ular field with incised linear ornaments. Colour, red but blackened by soot. Height 8 cm. Diam. 6.3 cm. Found in the S. W. corner, close to the S. side wall and 15 cm. below the roof.

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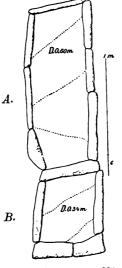


Fig. 279 A. Grave 204.

— B. Grave 205.

D. Oblong cist. Length 0.75 m., breadth 0.3 m., depth 0.12 m. Filled with loose soil.

Grave 204. (Fig. 279 A). Almost rectangular cist. Length 1.4 m., breadth about 0.5 m., depth 0.6 m. Filled with loose soil.

Grave 205. (Fig. 279 B). Almost square cist. Length 0.6 m., breadth about 0.5 m., depth 0.54 m. Filled with loose soil.

# REMARKS ON THE BURIAL GROUND AT CHIRCOT.

It is shown on the plan and in the introductory notes upon this burial ground that it was encircled almost all the way round by a stone-bordering and that it contained 205 cists, distributed in three layers. The cists of the bottom layer, which of course were the oldest, were found to be

arranged in three groups. Immediately above were the cists of the second layer. This second layer in each group had a wider circumference than the underlying one. The middle layer, again, had the top layer immediately over it, the cists of that one being evenly distributed over the whole area of the burial ground; they were met with all over at the same depth, I-I'/2 metres below the surface. The surface of the burial ground was almost flat and was on a level with the surrounding ground for the most part, only rising a few feet in a gentle slope on the three spots where the cists lay in three storeys.

The graves as a rule ran in the direction E.—W., though considerable variations existed here and there, some graves even being built in the direction N. – S. All the cists proved to be entirely filled with soil, or almost so. Some graves were found to contain skeletons, or at least fragments of skeletons. In a few cases the skeletons were fairly well preserved, though proving too frail to admit of removal. The skeletons averaged 1.5—1.6 metres in length. The skulls were dolichocephalic. About a dozen skulls were in such a state of preservation that I could remove them. In most of the large cists the skeletons lay stretched out on their backs at full length, with the heads as a rule at the W. end. A large number of the cists, however, were so small that there was not room for the bodies to lie extended; in these cists only were portions of skeletons found, in heaps or bundles, the long bones lying promiscuously above, or quite close, to the head etc. The vessels deposited were found principally in the cists,

but in many cases outside too, usually at the head end, in a few cases upon the roof. Most of the relics found inside the cists were in the vicinity of the head and the trunk. They were met with above the skeletons, at their sides and below them; a few of them were placed near the feet. Evidently no regular system had been followed with regard to their place or position. Most of the objects, however, were met with about half way from, or near to, the bottom of the cists, some higher up, a few even immediately below the roof.

The relics were chiefly pottery. Objects of stone were very sparingly represented by: 8 celts, 6 polishing-stones, 3 statuettes and two vessels. The rare occurrence of weapons may point to the generally peaceful character of the people. Of large crude household vessels, such as are usually employed for cooking, for carrying and storage of water, for the preparation of chicha etc., none were found, nor any pieces of such. It may also be pointed out that metates were entirely absent in the graves, though some fragments were come upon scattered about in the soil. Spoons were not met with, nor musical instruments, nor personal ornaments, save the copper bell and the diminutive mask mentioned above. No object of European origin was exhumed at Chircot.

Undoubtedly this burial ground with its 205 graves was a considerable period of time in use. On comparing, however, the construction of the cists of the different layers one with another, as well as the relics contained in them, we find that no marked differences are to be found, such as would indicate any cultural changes. The relics in the lowest and oldest layer show forms in everything resembling, or almost identical with, those of the highest.

Most of the cists, 131 in all, proved to contain no relics at all. The others contained from one or two to five. The vessels found were, as a rule, completely filled with soil. As they were removed without being emptied, a thorough examination could afterwards be made of their contents. This resulted, however, only in the find of some fragments of charred corn, charcoal, small pieces of potsherds and traces of some organic matter.

Several times in the course of the excavations of the burial ground, the examination of which has been described above, broken vessels and stone implements etc. were met with in such places above or between the cists as to preclude their being allotted to any special cist. A few of these scattered objects are shown on Pl. 34. The soil also contained in several places potsherds in abundance, only, however, of vessels similar to those in the graves. Most of the potsherds were plain red, only a few of them being painted in more than one colour.

\*

About fifty metres East of the field examined there was another, of somewhat less extent and for the most part demolished. The proprietor of the ground had here had a considerable number of cists broken up, in order to secure slabs for removal elsewhere. A few of the more decorative of the vessels then found in the graves had been preserved by the workmen and sold in Cartago, but the majority had been destroyed.

While I was fully occupied with the investigation of the above described burial ground (I), I sent Masís with a couple of men to excavate the other field (II) at such times as their assistance was not needed. In his excavations in this latter field Masís followed his own very rapid, though anything but scientific, method, which he had always worked upon when engaged in excavations on his own account.

Even in this field a considerable number of cists of the same construction as those of the first field were met with; they also occurred arranged in two or three storeys. Not a few of the cists proved to be undisturbed; this was especially the case, naturally enough, with the graves at the greatest depth. Masís succeeded in collecting from them a considerable number of relics, chiefly vessels of clay, though also a few stone-implements etc.

The field in question, having been to a large extent previously demolished, was not of course suited for systematic investigation, and therefore, rather than leave the graves for subsequent plunderings, whereby the relics would be scattered in all directions or destroyed, I availed myself in the above related manner of the opportunity afforded by my license to carry on excavations at the locality.

Most of the cists here were quite small. In many of them there were found fragments of skeletons deposited in bundles, usually only one in each cist, but in some two or three. The grave-finds may be said to resemble as a whole those of the first field. A number of the objects, as being of special interest,

owing to peculiarities of shape, ornamentation etc., are given in illustrations on Pl. 34—42 and described in the accompanying elucidatory text. A few are given below.

- a. Vessel-support (Fig. 280) of basalt lava, decorated with small animals' heads round the upper rim. Height 7.5 cm. Diam. 13.6 cm.
- bowl, richly decorated on the inside (Fig.



Fig. 280. — (1/2).

281) with highly conventionalized, long-nosed human heads and with arms in black and red on cream-coloured ground. The simple decoration of the outside is shown in Fig. 282.

c. Whistle (Fig. 283) in the shape of a human figure in sitting posture, with painted designs in red and black on whitish ground. At the top of the head there is a circular air-hole; the holes in the legs are oblong. At the base



Fig. 281. — (1/2)).

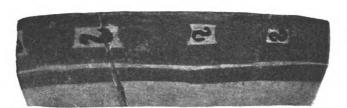
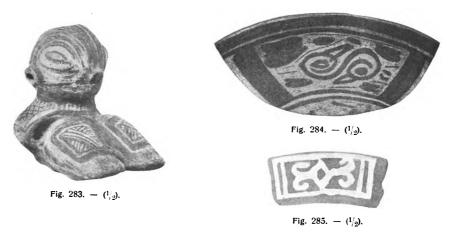


Fig. 282. -(1/2).

of the neck there is a small loop for suspension. The sex of the figure is not marked. It shows close resemblance to the clay statuettes described by W. H. Holmes in his \*Ancient Art of the Province of Chiriqui\*. Height 9 cm.

d. Bowl, large, shallow, hemispherical, almost covered with designs in red and black on whitish ground. The interior decoration of the walls is divided into four equal partitions — of which one is shown in Fig. 284 — all with

the same representation of a conventionalized, double-headed bird (?) (Compare Fig. 32, p. 33). The exterior decoration consists of geometrical designs in two partitions. Legs missing. Diam. 26 cm. Height of the body 8 cm.



e. Fig. 285 represents an ornament painted in yellow on a small tripod cup.



Fig. 286. — (1/2). Bowl from Troyo's collection; inserted here for reference to the ornament. See page 114.

#### III.

## LOS LIMONES.

aving finished my excavations at Chircot, I decided also to examine a number of graves on the mountain-slopes on the opposite side of the valley. Don Juan Cooper, a well-known Costa Rican naturalist in Cartago, was the first to inform me of the existence of graves in the neighbourhood of Los Limones, about 6 kilometres from Cartago. Lorenzo Masís had been excavating there from time to time and had met with numerous stone cists, though as a rule of small size. He thought that some small burial ground might still be left undisturbed, and we therefore visited the place. Grass-covered, or almost barren, hillsides and steep slopes are there met with on every side. An affluent of the Rio de la Reventazon passes close by in a deep cañon. On the tops of the hills in several places were seen traces of the small devastated aboriginal burial grounds. Stone slabs of various sizes thrown about the ground marked these spots.

In one place, at a distance of only some 300 metres from each other, we found two low, almost elliptical, artificial mounds, each about one metre high at the centre and marked by some obtruding boulders. These mounds sloped gradually down to the ground close by, no rows of stones marking their limits.

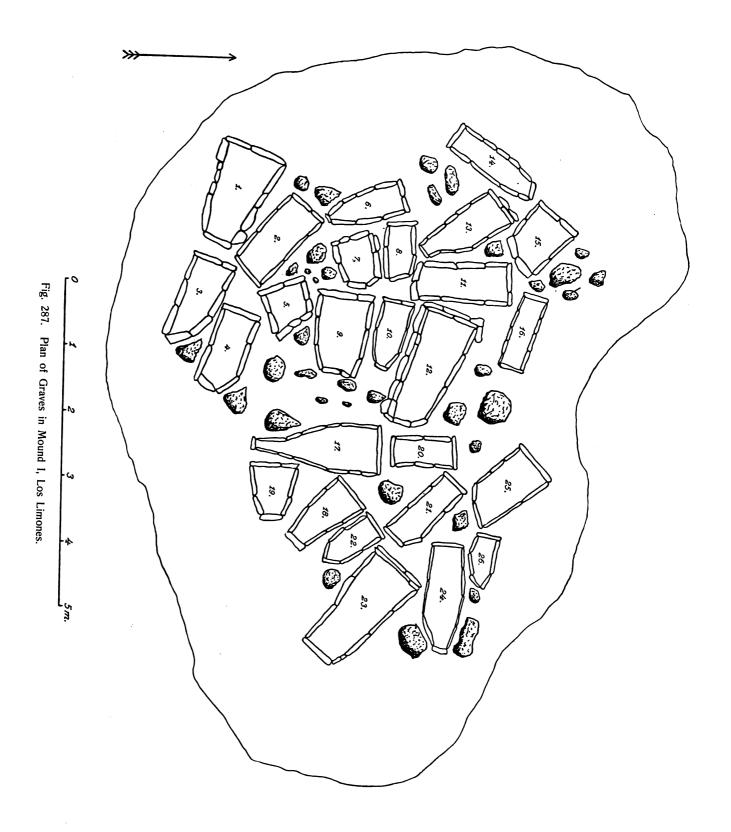
The first burial mound excavated contained 26 cists, which were met with at a depth of about 1 m. below the surface. They were built in the same manner as the cists at Chircot above described, but they were arranged in a single layer.

As was found to be the case in the fields described above, all the cists were quite filled with soil, or nearly so, the soil in this place consisting of a reddish clay, very hard and sticky.

Most of the graves contained no antiquities.

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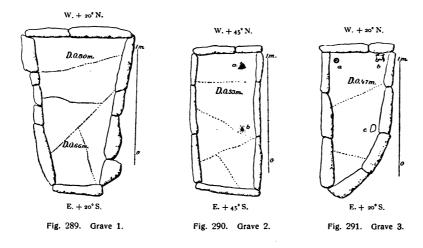


#### MOUND I, LOS LIMONES.

Grave 1. (Fig. 289). Oblong cist. Length 1.4 m., breadth at the W. end 0.85 m., at the E. 0.4 m., depth at the W. end 0.8 m., at the E. 0.66 m. Filled with soil (clay).

Grave 2. (Fig. 290). Rectangular cist. Length 1.25 m., breadth 0.55 m., depth 0.53 m. Contained:

a. Small, nearly cylindrical, tripod vessel, resembling Pl. 16, Fig. 8, but adorned with a small knob on each leg. Colour, red. Height 6.5 cm. Diam. 5.2 cm. Found standing in the N. corner, 32 cm. below the roof.



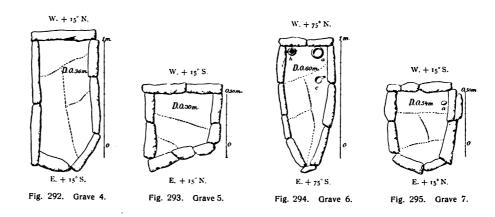
- Grave 3. (Fig. 291). Almost triangular cist. Length 1.2 m., breadth at the W. end 0.6 m., depth 0.47 m. Contained:
- a. (Pl. 43, Fig. 3). Small jug of unusual shape, with four oblong depressions in the walls; below the rim there is an encircling cord; on one side a small ear and on the opposite one a small animal's head turned upwards. Colour, red but blackened by soot. Height 5.6 cm. Diam. 4.6 cm. Found standing in the W. corner, 30 cm. below the roof.
- 6. Small tripod, decorated round the rim with a broad band painted white, which is now, however, almost obliterated; legs in the shape of animals' heads. Resembles Pl. 25, Fig. 4 and Pl. 40, Fig. 1. Colour, red. Height 7.2 cm. Diam. 8.3 cm. Found standing in the N. corner, 23 cm. below the roof.
- c. Polishing-stone, 7.8 cm. in length. Found fairly close to the N. side wall, 40 cm. below the roof.

Grave 4. (Fig. 292). Oblong cist. Length 1.2 m., breadth 0.5 m., depth 0.36 m. No antiquities.

Grave 5. (Fig. 293). Almost square cist. Each side about 0.6 m., depth 0.3 m.

Grave 6. (Fig. 294). Almost triangular cist. Length 1.15 m., breadth at the N. end 0.4 m., depth 0.6 m. Contained:

a. (Pl. 43, Fig. 1). Small shallow bowl on annular base; walls, low, nearly upright. Round the lower margin of the body there is a row of small punctate knobs. The outside is decorated with yellow geometrical designs, now, however, almost obliterated. Colour, red. Height 6.3 cm. Diam. 11.5 cm. Found standing in the N. E. corner, 25 cm. below the roo.



- b. (Pl. 43, Fig. 2). Small tripod vase with rounded bottom and two ears; under the narrow indented rim are two rows of small punctate markings encircling the vessel. Colour, red. Height 5.5 cm. Diam. 7.6 cm. Found standing in the N. W. corner, 18 cm. below the roof.
- c. Diminutive spoon with circular bowl and handle ending in an animal's head. Somewhat resembles Pl. 73, Fig. 3. Colour, red. Length 10.6 cm. Found lying quite close to the E. side wall, 18 cm. below the roof.

Grave 7. (Fig. 295). Oblong cist. Length 1.15 m., breadth about 0.7 m., depth 0.54 m. Contained:

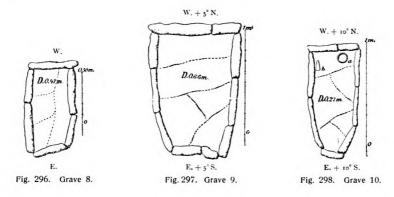
a. A polishing-stone. Length 5 cm. Found in the W. corner, close to the N. wall, 30 cm. below the roof.

Grave 8. (Fig. 296). Oblong cist. Length 0.75 m., breadth about 0.3 m., depth 0.47 m.

Grave 9. (Fig. 297). Oblong cist. Length 1.1 m., breadth 0.65 m., depth 0.66 m.

Grave 10. (Fig. 298). Oblong cist. Length 0.9 m., breadth 0.4 m., depth 0.27 m. Contained:

- a. Small, plain, hemispherical bowl, on low, annular base. Resembles Fig. 45 on p. 58 in the text. Colour, red. Height 5.2 cm. Diam. 10 cm. Found standing near the N. W. corner, 8 cm. below the roof.
- b. (Pl. 43, Fig. 8). Celt, almost triangular, very thin, nearly flat, of greenstone, 10 cm. in length, 5 cm. thick. Found near the W. corner, 10 cm. below the roof.



Grave 11. (Fig. 299). Rectangular cist. Length about 1.3 m., breadth 0.5 m., depth 0.67 m. Contained:

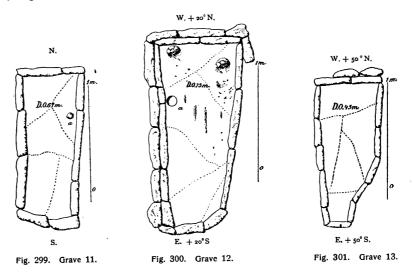
a. (Pl. 43, Fig. 10). Small tripod vessel, almost in the shape of a bird but with the beak and the tail broken off. The vessel is painted white and decorated with red bands, now partly obliterated. Height 6.5 cm. Diam. 6 cm. Found lying quite close to the N. side wall, 60 cm. below the roof.

Grave 12. (Fig. 300). Oblong cist. Length 1.7 m., breadth at the W. end 0.7 m., at the E. end 0.5 m., depth 0.75 m. Contained:

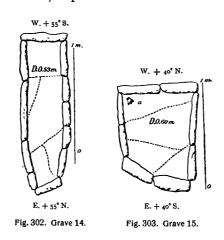
a. Small, plain, hemispherical bowl of a yellowish colour. Resembles Pl. 27, Fig. 3. Height 5.4 cm. Diam. 10.3 cm. Found standing close to the S. side wall, 60 cm. below the roof.

Grave 13. (Fig. 301). Oblong irregular cist. Length 1.3 m., breadth a the N. W. end 0.55 m., at the S. E. end 0.2 m. Depth 0.45 m.

Grave 14. (Fig. 302). Rectangular cist. Length 1.3 m., breadth about 0.35 m., depth 0.53 m.



Grave 15. (Fig. 303). Almost square cist. Length 0.9 m., breadth about 0.6 m., depth 0.6 m. Contained:



Height 15.6 cm. Diam. 22.2 cm.

a. Nearly cylindrical, tripod vessel, with a rough cord round the shoulder. Each leg adorned with an animal figure with head turned upwards. Resembles Pl. 43, Fig. 5. Colour, red. Height 8.3 cm. Diam. 5.2 cm. Found standing in the W. corner, 15 cm. below the roof.

Outside the cist, close to the W. corner and 10 cm. above the roof, I found a large, shallow, tripod bowl, hemispherical in shape, with an animal's head in relief on one side. Resembles in general shape Pl. 27, Fig. 9. Colour, red. The walls are decorated on

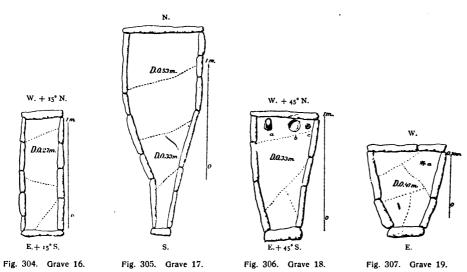
the outside with three encircling bands in yellow, now mostly obliterated. Broken.

Grave 16. (Fig. 304). Rectangular cist. Length 1.2 m., breadth 0.3 m., depth 0.27 m.

Grave 17. (Fig. 305). Cist, oblong, of peculiar shape, very narrow at the S. end. Length 1.85 m., breadth at the N. end 0.65 m., at the S. end 0.15 m., depth at the N. end 0.5 m., at the S. end 0.33 m.

Grave 18. (Fig. 306). Oblong cist. Length 1.1 m., breadth at the N. W. end 0.55 m., at the S. E. end 0.25 m., depth 0.33 m. Contained:

a. (Pl. 43, Fig. 9). Stone figure, human, in sitting posture and playing a flute. Head oblong, flattened. Height 13.4 cm. Found in upright position close to the W. corner, 15 cm. below the roof.



- b. Bowl, plain, hemispherical, tripod, almost coated with whitish colour over the customary red ground. Resembles in general shape of body Pl. 27, Fig. 9. Height 7.4 cm. Diam. 10.8 cm. Broken. Found close to the N. end wall, 28 cm. below the roof.
- c. (Pl. 43, Fig. 6). Small tripod vessel with two small knobs, animals' heads, by way of ears. Colour, red. Height 6.5 cm. Found standing in the N. corner, 25 cm. below the roof.

Grave 19. (Fig. 307). Almost triangular cist. Length 0.75 m., at the W. end 0.7 m., at the E. end 0.35 m., depth 0.47 m. Contained: a small fragment

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of bone and at  $\alpha$ , in the S. W. corner and 30 cm. below the roof, some red substance, apparently paint.

Grave 20. (Fig. 308). Rectangular cist. Length about 0.8 m., breadth about 0.3 m., depth 0.35 m.

a. (Pl. 43, Fig. 7). Bowl, hemispherical, on high annular base, the walls of which are perforated with four rectangular holes. Round the vessel there is a row of rudimentary animals' heads. Colour, red. Height 9.2 cm. Diam. 17.6 cm. Broken. Found standing in the N. E. corner, 15 cm. below the roof.

Grave 21. (Fig. 309). Rectangular cist. Length 1.2 m., breadth about 0.35 m., depth 0.42 m.  $_{W+40^{\circ}N}$ .

Grave 22. (Fig. 310). Oblong cist. Length 0.85 m., breadth about 0,35 m., depth 0.54 m.



Fig. 308. Grave 20.

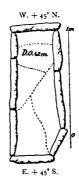


Fig. 309. Grave 21.

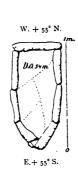


Fig. 310. Grave 22.

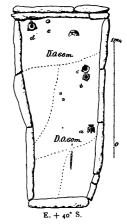
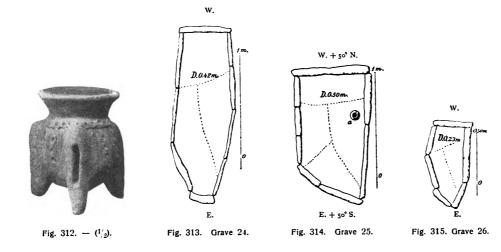


Fig. 311. Grave 23.

Grave 23. (Fig. 311). Oblong cist, somewhat broader at the N. W. end. Length 1.7 m., breadth at the N. W. end 0.8 m., at the S. E. end 0.5, depth at the N. W. end 0.66 m., at the S. E. end 0.6 m. Contained some small fragments of a skeleton and the following objects:

- a. (Fig. 312). Small tripod vase with flaring rim. The legs are attached to the walls of the body of the vase; they are solid, but a deep, longitudinal incision represents the usual slit on hollow legs. The vessel is decorated with punctate fillets and parallel incised lines. Colour, red. Found standing quite close to the N. E. side wall, 40 cm. below the roof.
- b. (Pl. 43, Fig. 4). Small tripod bowl with two ears and, on one side, a head with arms in relief. Height 4.3 cm. Diam. 5.1 cm. Found standing quite close to the N. E. side wall, 45 cm. below the roof.

- c. Small tripod vessel, with two ears, resembling Pl. 20, Fig. 5. The vessel is decorated with parallel lines painted in white, apparently drawn with a comb-like instrument. Height 5.2 cm. Diam. 6.5 cm. Found standing quite close to the vessel  $\delta$ ., 45 cm. below the roof.
- d. (Pl. 43, Fig. 5). Nearly cylindrical, tripod vessel, adorned with a rough cord round the neck. Legs show a small animal figure in relief; head turned upwards. Colour, red. Height 10.2 cm. Diam. 6.1 cm. Found standing in the W. corner, close to the N. W. end wall and 30 cm. below the roof.
- e. Polishing-stone, 3.5 cm. in length. Found lying in the W. corner, close to the N. W. end wall and 10 cm. below the roof.



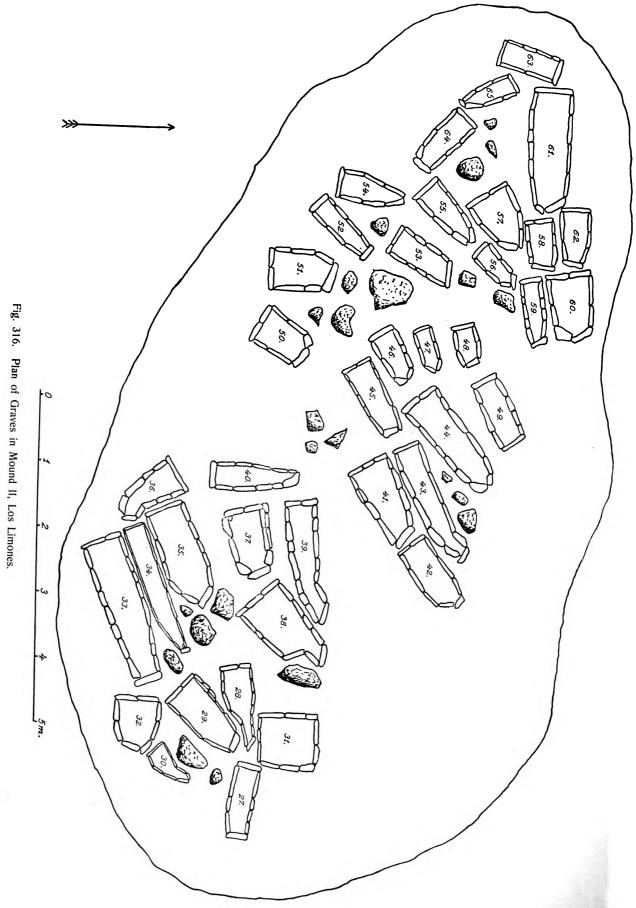
Grave 24. (Fig. 313). Oblong cist. Length 1.55 m., breadth about 0.45 m. depth 0.42 m.

Grave 25. (Fig. 314). Oblong cist. Length about 1.1 m., breadth about 0.6 m., depth 0.5 m. Contained:

a. Small tripod vessel with wide orifice and two ears; round the base of the very narrow rim there is an incised chequered band. Resembles Pl. 43, Fig. 2. Colour, red. Height 6.8 cm. Diam. 9.1 cm. Found 10 cm. below the roof, quite close to the N. E. side wall.

Grave 26. (Fig. 315). Oblong cist. Length 0.7 m., breadth about 0.3 m., depth 0.23 m.

18



#### MOUND II, LOS LIMONES.

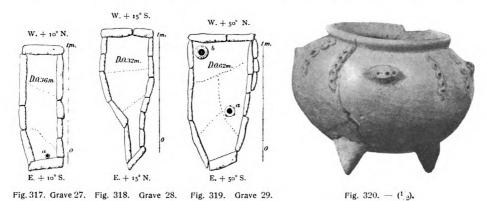
Grave 27. (Fig. 317). Rectangular cist. Length 1.1 m., breadth about 0.3 m., depth 0.36 m. Contained:

a. Small, nearly cylindrical, tripod vessel. Legs in the shape of animals' heads. Resembles Pl. 16, Fig. 1. Colour. red. Height 7 cm. Diam. 5 cm. Found standing close to the middle of the E. end wall, 25 cm. below the roof.

Grave 28. (Fig. 318). Cist of irregular shape. Length 1.1 m., breadth at the W. end 0.4 m., at the E. end 0.15 m., depth 0.35 m.

Grave 29. (Fig. 319). Almost triangular cist. Length 1.1 m., breadth at the W. end 0.6 m., at the E. end 0.3 m., depth 0.62 m. Contained:

a. (Pl. 44, Fig. 5). Tripod vessel with flaring rim; on each side of the



body is a face in low relief. Legs in the shape of heads. Colour, red. Height 12 cm. Diam. 8.5 cm. Found standing 10 cm. from the N. W. side wall and 35 cm. below the roof.

b. (Fig. 320). Depressed globular, tripod vessel with a narrow, flaring rim, two ears and very short feet. On each side a small rudimentary head and two pairs of vertical punctate fillets. Colour, yellowish. Height 8.5 cm. Diam. 11.5 cm. Found standing in the S. corner, 25 cm. below the roof.

Grave 30. (Fig. 321). Almost triangular cist. Length 0.7 m., breadth at the S. W. end 0.3 m., at the N. E. end 0.1 m. Depth 0.21 m. Contained:

a. Shallow bowl of a red colour with low curved walls. Height 9 cm. Diam. 11.5 cm. Resembles Pl. 27, Fig. 3. Broken. Found in the W. corner; 7 cm. below the roof.

Grave 31. (Fig. 322). Square cist. Sides about 0.75 m. long; depth 0.47 m.

Grave 32. (Fig. 323). Nearly square cist. Length 0.7 m., breadth 0.7 m., depth 0.42 m.

Grave 33. (Fig. 324). Almost rectangular cist. Length 2.15 m., breadth about 0.5 m., depth 0.53 m. Contained:



Fig. 321. Grave 30.

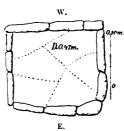


Fig. 322. Grave 31.

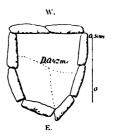
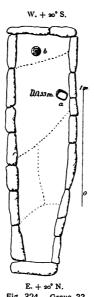


Fig. 323. Grave 32.

a. (Fig. 325). Shallow, nearly rectangular bowl of the shape of an animal; the walls are low and upright. The four legs, the head and the tail are



E. + 20° N. Fig. 324. Grave 33.



Fig. 325. — (1/2).



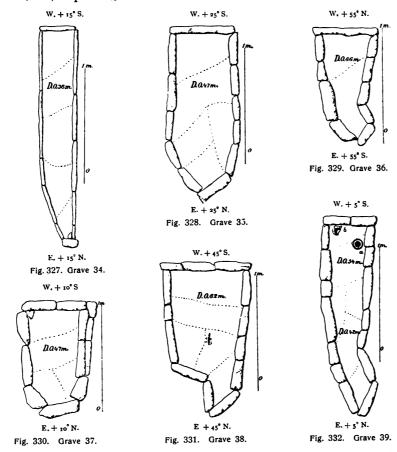
Fig. 326. — (1/2).

broken off. The outside of the wall is adorned with an incised guilloche design. Colour, red. Height 4.5 cm. Length about 11.5 cm. Found standing fairly close to the N. side wall, 10 cm. below the roof.

b. (Fig. 326). Small, tripod, globular vessel; rim curves inwards; two ears extend from the rim to the shoulder. Each side of the rim is adorned with a small face in low relief and on the shoulder below there are four cord-like vertical fillets. Feet very short. Colour, red. Height 8 cm. Diam. 8.7 cm. Found standing 8 cm. from the W. end wall, 20 cm. below the roof.

Grave 34. (Fig. 327). Almost rectangular cist. Length 2.1 m., breadth about 0.3 m., depth 0.36 m.

Grave 35. (Fig. 328). Almost rectangular cist. Length 1.7 m., breadth about 0.7 m., depth 0.45 m.



Grave 36. (Fig. 329). Almost triangular cist. Length 1.1 m., breadth at the N. end 0.5 m., depth 0.66 m.

Grave 37. (Fig. 330.) Almost rectangular cist. Length 0.9 m., breadth about 0.45 m., depth 0.47 m.

Grave 38. (Fig. 331). Oblong, irregular-shaped cist. Length 1.3 m., breadth at the S. W. end about 0.7 m., depth 0.62 m. Contained some small fragments of bone near the middle of the grave.

Grave 39. (Fig. 332). Oblong cist. Length 1.75 m., breadth about 0.35 m., depth at the W. end 0.35 m., at the E. end 0.2 m. Contained:

- a. (Fig. 333). Small bowl, globular but much depressed; two ears and an animal's head in relief on each side of the shoulder; vertical fillets all round the body. Colour, red but blackened by soot. Height 6 cm. Diam. 10 cm. Found close to the N. side wall and near the N. W. corner.
- b. (Fig. 334). Small shallow bowl, with a rim curved inwards, two small ears, and an animal's head and tail in relief. Base annular, missing. Black



Fig. 333. — (1/2)



Fig. 334. — (1/2).

paintings adorn the rim. Colour, red. Height 4 cm. Diam. 8.8 cm. Broken. Found in the S. W. corner, 15 cm. below the roof.

Grave 40. (Fig. 335). Almost triangular cist. Length 1.25 m., breadth at the S. end 0.3 m., depth 0.45 m. Contained:

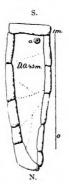


Fig. 335. Grave 40.

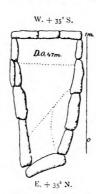


Fig. 336. Grave 41.

a. Diminutive, nearly globular vessel with two small ears. The body resembles in general shape that of Pl. 33, Fig. 4. Colour, yellowish. Height 46 cm. Diam. 5.6 cm. Found in the S. E. corner, 15 cm. below the roof.

Grave 41. (Fig. 336). Oblong cist. Length 1.2 m., breadth at the S. W. end 0.6 m., at the N. E. end 0.47 m., depth 0.47 m.

Grave 42. (Fig. 337). Oblong cist. Length 1.1 m., breadth about 0.4 m., depth 0.27 m.

Grave 43. (Fig. 338). Oblong cist. Length 1.75 m., breadth about 0.3 m., depth 0.62 m. Contained:

- a. Bowl, tripod, with high and nearly upright walls; a human face in relief on each side and geometrical designs in yellow in the intermediate spaces. Legs in the shape of heads, painted white. Resembles Pl. 40, Fig. 1. Colour, red. Height 9.5 cm. Diam. 12 cm. Broken. Found standing in the W. corner, 30 cm. below the roof.
- b. Upper, cylindrical part of a clay vessel with a small figure in relief on one side. Colour, red. Height 5.4 cm. Diam. 4.2 cm. Found fairly close to the N. W. side wall, 18 cm. below the roof.
- c. Fig. 339. Diminutive, hemispherical, tripod bowl. Colour, red. Height 2.7 cm. Diam. 6.9 cm. Found in the W. end of the grave, 25 cm. below the roof.  $w_{+35}$ °s.
- d. (Pl. 44, Fig. 3). Clay spoon; handle in the shape of a small human figure. Colour, red. Length 9.6 cm. Found lying close to the N. side wall, near the N. E. end of the grave and 20 cm. below the roof.

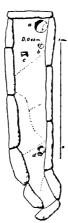
Grave 44. (Fig. 340). Nearly rectangular cist. Length 1.5 m., breadth about 0.4 m., depth 0.45 m. Contained:

a. (Pl. 44, Fig. 1). Small, nearly cylindrical, tripod vase with flaring rim and slender legs with knobs (heads) at the base. Colour, red. Height 7.4 cm. Diam. 4.3 cm. Found close to the S. W. end wall, 25 cm. below the roof.

6. (Pl. 44, Fig. 2). Small, globular, long-necked bottle, almost covered with incised, geometrical designs. Colour, red. Height 8 cm. Diam. 7.2 cm. Found in the N. W. corner, 20 cm. below the roof.



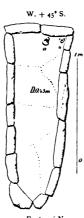
E. + 35° N. Fig. 337. Grave 42. W. + 30° S.



E. + 30° N. Fig. 338. Grave 43.



Fig. 339. -(1/2).



E. + 45° N. Fig. 340. Grave 44.

Grave 45. (Fig. 341). Almost rectangular cist. Length 1.15 m., breadth about 0.35 m., depth 0.36 m.

a. (Fig. 342). Hemispherical bowl of graceful shape; has a knob on one side. Round the upper part of the body there runs a band with incised, geometrical designs. Height 5.5 cm. Diam. 10 cm. Colour, brown. Found standing fairly close to the S. E. side wall, 10 cm. below the roof.

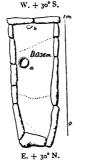




Fig. 341. Grave 45.

Fig. 342. — (1/2).

b. Celt of greenstone, almost triangular, flattened. Resembles Pl. 25, Fig. 9. Length 5.1 cm. Found fairly close to the S. W. end wall, 30 cm. below the roof.

Grave 46. (Fig. 343). Almost rectangular cist. Length 0.7 cm., breadth about 0.25 m., depth 0.33 m.

Grave 47. (Fig. 344). Almost rectangular cist. Length 0.6 m., breadth 0.2 m., depth 0.21 m.



Fig. 343. Grave 46.

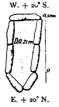


Fig. 344. Grave 47.

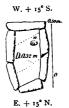


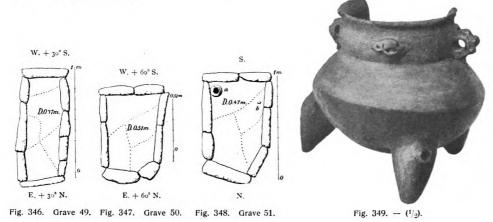
Fig. 345. Grave 48.

Grave 48. (Fig. 345). Rectangular cist. Length 0.5 m., breadth about 0.25 m., depth 0.32 m.

a. (Pl. 44, Fig. 4). Small tripod vessel in the shape of a bird. Colour, whitish. The wings are indicated by bands of red paint. Height 7 cm. Length 7.2 cm. Found standing fairly close to the N. side wall, 12 cm. from the N. W. corner and 25 cm. below the roof.

Grave 49. (Fig. 346). Rectangular cist. Length 1 m., breadth 0.3 m., depth 0.37 m.

Grave 50. (Fig. 347). Rectangular cist. Length 0.7 m., breadth about 0.45 m., depth 0.51 m.



Grave 51. (Fig. 348). Almost rectangular cist. Length 0.85 m., breadth about 0.5 m., depth 0.47 m.

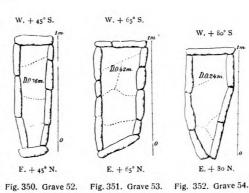
a. (Fig. 349). Tripod vessel, rather large, with hemispherical bottom; high upright rim, adorned with a small animal's head in relief on each side and with two ears. Each leg shows a circular perforation in front. Colour, red. Height II cm. Diam. II.I cm. Broken. Found standing in the S. E. corner, 30 cm. below the roof.

b. Polishing-stone, small, black. Length 2.8 cm. Found fairly close to the E. side wall, 25 cm. below the roof.

Grave 52. (Fig. 350). Almost rectangular cist. Length 0.95 m., breadth about 0.25 m., depth 0.36 m.

Grave 53. (Fig. 351). Almost rectangular cist. Length about 0.9 m., breadth about 0.32 m., depth 0.42 m.

Grave 54. (Fig. 352). Almost rectangular cist. Length 0.95 m., breadth at the end 0.35 m., depth 0.24 m.

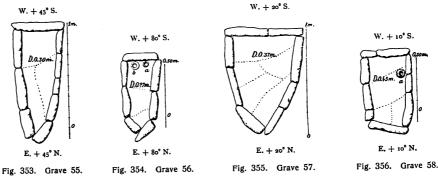


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Grave 55. (Fig. 353). Almost triangular cist. Length 0.95 m., breadth at the S. W. end about 0.35 m., depth 0.3 m.

Grave 56. (Fig. 354). Almost rectangular cist. Length 0.6 m., breadth about 0.25 m., depth 0.27 m.

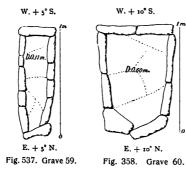
- a. Small, shallow, plain, red bowl with almost upright walls. Resembles Pl. 27, Fig. 4. Height 3.7 cm. Diam. 5.8 cm. Colour, red. Found close to the S. end wall.
- 6. Annular vessel-support of clay, with two small degenerate animals' heads at the upper rim. Resembles Pl. 44, Fig. 7. Colour, whitish, adorned with red bands, now, however, nearly obliterated. Height 3.7 cm. Diam. 6.6 cm. Found standing close to the S. end wall.



Grave 57. (Fig. 355). Almost triangular cist. Length 0.8 m., breadth at the W. end 0.6 m., depth  $0.37\,$  m.

Grave 58. (Fig. 356). Almost rectangular cist. Length 0.7 m., breadth about 0.35 m., depth 0.45 m. Contained:

a. Small, depressed globular vessel, with a face in relief on one side and a looped handle on the other. Resembles Pl. 28, Fig. 3. Colour, red. Height 5.4 cm. Diam. 7.8 cm. Found standing close to the N. side wall, 25 cm. below the roof.



Grave 59. (Fig. 357). Rectangular cist. Length 0.9 m., breadth 0.25 m., depth 0.17 m.

Grave 60. (Fig. 358). Almost rectangular cist. Length 0.8 m., breadth about 0.55 m., depth 0.6 m.

Grave 61. (Fig. 359). Almost rectangular cist. Length 1.7 m., breadth about 0,5 m., depth 6.72 m. Contained:

a. (Pl. 44, Fig. 6). Pitcher of unusual form; globular body on small annular base; the upper cylindrical part is flattened and provided with a handle extending to the shoulder. Colour, red. Height 10.7 cm. Diam. 10.3 cm. Found standing almost in the S. W. corner, 60 cm. below the roof.

b. Diminutive, nearly globular, tripod bowl with wide orifice and two ears. Legs missing. Resembles Pl. 25, Fig. 10, but is without ornaments. Colour, red. Height 4.8 cm. Diam. 5.5 cm. Found 8 cm. from the N. side wall, 40 cm. below the roof.

Grave 62. (Fig. 360). Almost rectangular cist. Length 0.75 m., breadth about 0.35 m., depth 0.5 m.

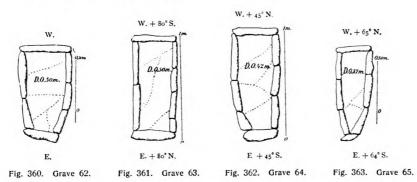


Fig. 359. Grave 61.

Grave 63. (Fig. 361). Rectangular cist. Length 0.85 m., breadth 0.3 m. depth 0.5 m.

Grave 64. (Fig. 362). Almost rectangular cist. Length 0.91 m., breadth about 0.3 m., depth 0.42 m.

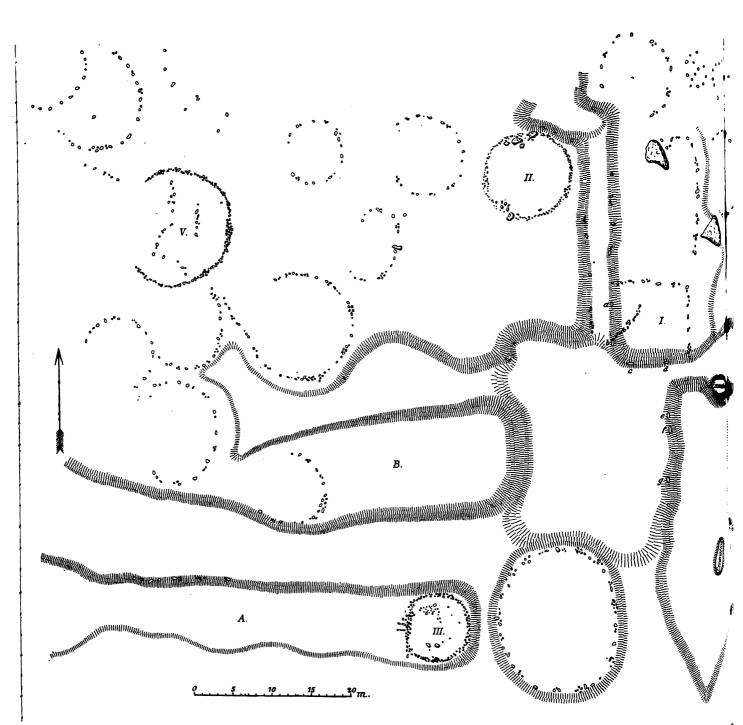
Grave 65. (Fig. 363). Almost triangular cist. Length 0.75 m., breadth at the N. end 0.25 m., depth 0.37 m.



The two burial mounds at Los Limones contained graves of the same construction as those at Chircot. The articles found in the graves were mostly of clay, embracing vases, bowls, 2 spoons and one vessel-stand. Objects of stone

were scarce, only 2 celts and a small image. The majority of the graves contained no relics whatever. The earthenware vessels found in the graves at Los Limones rather closely resemble those found at Santiago, both as regards shape, size and the material out of which they are made. Most of the clay vessels are of a red colour, but comparatively few are decorated with painted designs. Not a single multicoloured clay vessel of any size was found. In the soil above and between the graves a number of objects were met with, as was the case generally in other parts; the majority of these objects were in fragments.

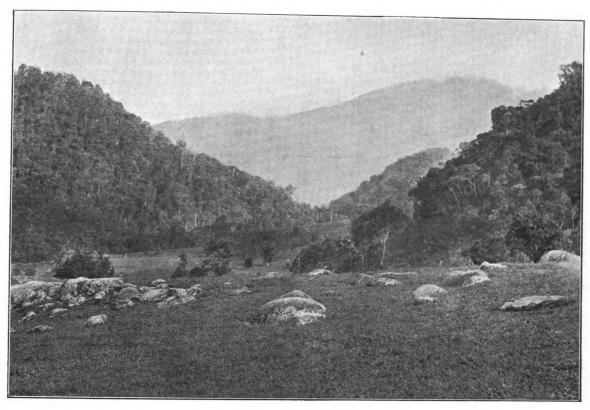
A third small burial ground was dug up during my absence by Masís in the vicinity of the two above mentioned. This also contained stone cists. Some of the more remarkable of the objects he found there are figured on Pl. 45, Figs. 1—9 and Pl. 44, Fig. 8.



GENERAL PLAN OF THE  $^{jj}$ 



REMAINS AT OROSI.



View of the Valley of Orosi above the Hot Springs.

# IV.

# OROSI.

y excavations at Los Limones being concluded, I went next to Orosi, an ancient Indian dwelling-place, situated right in the mountains, about 10 kilometres S. E. of Cartago. There now exists a coffee hacienda of recent establishment on the very spot where the extensive ancient remains are spread. Orosi lies on an open grass-meadow, about a league in length and forming a valley, being shut in by wooded heights on either side. Near the remains there are a number of old stone-quarries; it is very probable that these, in conjunction with other advantages of the locality, such as the existence there of hot springs, were what enticed the natives to select this spot as a dwelling-place. Hot springs would seem to have proved an attraction in other parts of Costa Rica too.

From the valley of Orosi an extensive view of the open plains below is obtained and also of the wooded slopes of Mt. Irazu on the opposite side. Two

rapid streams, tributaries of the Rio de la Reventazon, unite their waters at this point. One of these streams skirts the open grass-meadow which contains the principal ancient remains (See the General Plan and Pl. 46, 47, 48). Dense and luxuriant arboreal vegetation hides from view the rapid river hurrying along far below. The grass-meadow, which slopes towards the East and is intersected by a brook, is dotted over with a considerable number of circles and semicircles, bordered by stones and now overgrown with grass and weeds; they vary very much in size, from 8 or 10 to 20 metres in diameter, and are mostly on a level with the surrounding ground, though they do also often occur raised above it, at least on the side where the ground is lowest, thus forming platforms, usually from half a metre to one or two metres high. There was also to be seen on the meadow a rectangular space about 27 m. in length and 17 m. in breadth, which presumably has served as an open court-yard. This area has been formed by throwing up the soil within it towards the sides; it lies about 3 m. below the earthworks surrounding it. In the S. W. part of the meadow there are two low oblong embankments, partly artificial, running in the direction E.—W. The average measurements are: for embankment A (on the General Plan) 55 m. in length, 8-10 m. in breadth and 1 m. in height, for embankment B, 45 m. in length, 12 m. in breadth and 3 m. in height at the E., 1 m. at the W. end.

Stone circles were also found in great numbers in the adjacent banana plantations, though there they were naturally for the most part demolished. They were met with in the coffee-plantation too, on the E. side of the meadow, as well as higher up in the valley above the hacienda.

Treasure-hunters had carried out their plunderings at Orosi to some extent, but most of the remains in the parts not cultivated had been left intact. By means of soundings with the steel rod and by digging a large number of test holes in the stone circles, I ascertained that some, but only a few, contained stone cists. Most of these latter enclosures I dug through. On the General Plan those enclosures which were entirely excavated, are marked I—V. The cists were constructed in the same manner as before described. They were filled with loose soil, often mixed with numerous pebbles and stones, of the size even of a man's fist, and also chips and potsherds. The soil over the whole area of the enclosures excavated proved to contain a great number of cobble-stones and pebbles and also quantities of stone-workers' shop refuse, chips and flakes as well as broken or rejected stone-implements in various stages of elaboration. A few finished tools were also met with. The material was almost exclusively greenstone, of which the underlying rocks of the vicinity consist, as may be seen in the brooks. Fragments of pottery were abundant too.

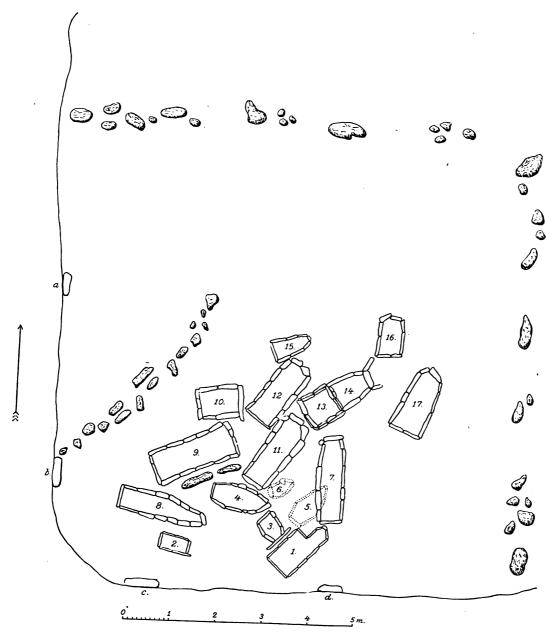


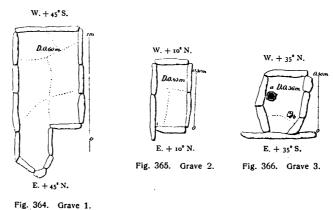
Fig. 364. Plan of Group I, Orosi.

## GROUP I, OROSI.

The first enclosure or group containing stone cists which I excavated in entirety, lay in the N. E. corner of the court-yard at a height of about 3 metres above it. The enclosure was almost square, each side measuring about 10 m. On two sides it was marked off by a low stone-bordering in the surface of the ground, on the other two by the court-yard and a broad ditch extending from it. At each of the two sides last referred to there stood two upright, flat, oblong stones (a, b, c, d) on plan, p. 151), from 1 to 2 m. high. From the S. W. corner there ran a row of stones for some distance in a N. E. direction. The whole enclosure was in an unimpaired state and contained seventeen stone cists, at the depth of about one metre. Two of them lay, however, in a second layer immediately below the first. The cists with their contents are described below. A few of the more interesting forms of the sporadic finds in the soil outside the graves are illustrated on Pl. 51, Figs. 1—9 and Pl. 52, Figs. 1—11.

Grave 1. (Fig. 364). Almost rectangular, irregular cist. Length 1.3 m., breadth 0.7 m., depth 0.6 m.

Grave 2. (Fig. 365). Rectangular cist. Length 0.75 m., breadth 0.4 m., depth 0.45 m.



Grave 3. (Fig. 366). Oblong cist. Length 0.65 m., breadth about 0.5 m., depth  $_{0.46}$  m. Contained:

a. (Pl. 50, Fig. 9). Small tripod vessel with wide mouth and high upright rim. The vessel is adorned on one side with the face, wings and feet of an

owl, on the opposite side there is a tail. Colour of the body, red with white criss-cross lines all over. The rim is coloured purple. The vessel is blackened with soot. Height 6.6 cm. Diam. 8.5 cm. Found standing close to the S. W. side wall, 20 cm. below the roof.

b. Chip, probably of some crudely chipped implement of greenstone 1). Length 6 cm. Found fairly close to the N. side wall, 25 cm. below the roof.

Grave 4. (Fig. 367). Oblong cist. Length 1.4 m., breadth about 0.6 m, depth 0.72 m. Contained:

- a. (Pl. 49, Fig. 2). Notched, crudely chipped, stone axe, mutilated. Length 8 cm. Found fairly close to the N. side wall, 20 cm. below the roof.
- b. (Pl. 49, Fig. 6). Oval and flat, leaf-shaped, chipped, stone implement. Length 7.5 cm. Found fairly close to a near the N. side wall and 22 cm. below the roof.
- c. (Pl. 49, Fig. 5). Celt, polished, with nearly parallel, rounded sides and almost straight edge. The base was broken off. Length 7.5 cm. Found close to the W. end wall, 10 cm. below the roof.

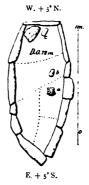


Fig. 367. Grave 4.

Outside the cist, on the roof near the W. end, there lay an oblong, rosa-coloured, perforated bead made out of a shell. (Pl. 49, Fig. 7). Length 5 cm.

Grave 5. (Fig. 368). Oblong cist. It belongs to the second layer which was found immediately below the first. Length 1 m., breadth about 0.5 m., depth 0.25 m. Contained:

a. (Pl. 49, Fig. 8). Small, globular, wide-mouthed bowl with a narrow, flaring rim. Colour, whitish. The shoulder and rim are adorned with reddish streaks. Height 6.5 cm. Diam. 9.2 cm. Found standing close to the S. E. side wall, 15 cm. from the S. W. end wall, 7 cm. below the roof.

During the excavations at Orosi several vessels were met with of a similar shape, all painted white with reddish streaks. This group of ware is very thin and fragile, and the objects were evidently manufactured at one and the same locality, the material used being of the same kind in them all.



Fig. 368. Grave 5

b. Stone implement of the same shape as Pl. 60, Fig. 6. Found lying fairly close to the S. end wall, 5 cm. below the roof. (Lost during transport).

<sup>1)</sup> All the implements of stone from Orosi described below were of greenstone, unless otherwise noted.

Grave 6. (Fig. 369). Oblong cist belonging to the second layer. Length 0.65 m., breadth about 0.35 m., depth 0.36 m. Contained:

a. (Pl. 49, Fig. 9). Small, depressed globular, tripod vessel with upright rim. two ears and straight, slender legs. Colour, brick red. The whole vessel is decorated with white criss-cross lines. Height 9.2 cm. Diam. 9.6 cm. Found lying in the S. W. corner, 20 cm. below the roof.



b. (Pl. 49, Fig. 1). Small, nearly globular vessel with very Fig. 369. Grave 6. narrow mouth. Round the body are two rows of punctate markings and four small knobs high up on the shoulder. Colour, red. Height 6.6 cm. Diam. 7.3 cm. Found lying close to the middle of the S. E. side wall.

Grave 7. (Fig. 370). Rectangular cist. Length 2 m., breadth 0.6 m., depth 0.9 m. Contained:

a. (Fig. 371). Flake of obsidian, long and slender; edges sharp, point broken off. Length 5.7 cm. Found at the S. end, 60 cm. below the roof.

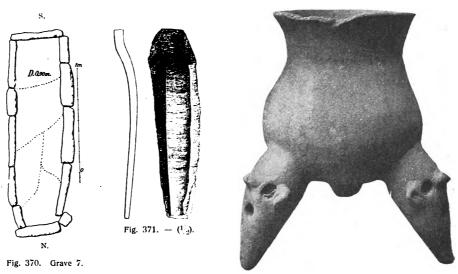


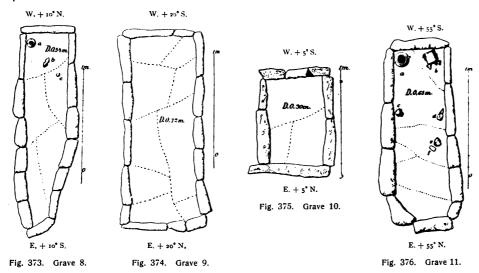
Fig. 372. — (1/3).

It is the only object of obsidian met with during all the excavations in the highlands. On the peninsula of Nicoya implements of obsidian have been found at various localities, as may be seen in the collections of the »Museo Nacional» in San José. But even on the Pacific side obsidian has been used very sparingly in most parts. During my own excavations there not even a single chip of obsidian was discovered.

Outside the cist, near the S. E. corner and some 20 cm. above the roof, was found a high and large tripod vessel (Fig. 372) with long out-spread legs in the shape of human heads. Colour, red. Height 21.7 cm. Diam. 14.2 cm.

Grave 8. (Fig. 373). Oblong cist. Length 2.1 m., breadth about 0.6 m., depth 0.54 m. Contained:

- a. (Pl. 49, Fig. 10). Small, globular vessel, with a narrow mouth and a nearly upright rim; it is adorned with four punctate knobs, projecting from the upper part of the shoulder. Colour, red. Height 7.4 cm. Diam. 8.6 cm. Found in the N. W. corner.
- b. Thin implement of stone, of the form exemplified by the specimen on Pl. 60, Fig. 6. Found at the W. end of the grave, 30 cm. below the roof. I found several specimens of this beautiful and singular form at Orosi, but not in any other locality. As far as I have been able to ascertain, this form has never been encountered outside the valley of Cartago. At Aguas Calientes it has been found fairly often. It shows no signs of wear and was perhaps only used for ceremonial purposes.
- c. Polishing-stone, ball-shaped. Diam. 3.5 cm. Found near the W. end, 40 cm. below the roof.

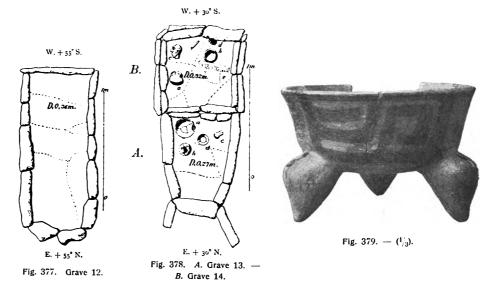


Grave 9. (Fig. 374). Rectangular cist. Length 1.8 m., breadth about 0.75 m., depth 0.7 m.

Grave 10. (Fig. 375). Nearly square cist. Length 0.8 m., breadth about 0.75 m., depth 0.3 m.

Grave 11. (Fig. 376). Rectangular cist. Length 1.8 m., breadth about 0.7 m., depth 0.65 m. Contained:

- a. (Pl. 50, Fig. 4). Graceful, globular vase on low and narrow, annular base; animals' heads as ears high on the shoulder. Colour, red. Height 10.5 cm. Diam. 15 cm. Found in the W. corner, 30 cm. below the roof.
- b. (Pl. 50, Fig. 8). Cylindrical, tripod vessel with the figure of a monkey in relief on each side; punctate nodes (hands?) round the rim. Legs in the shape of animals' heads. Height 13.3 cm. Diam. 11.7 cm.
- c. Piece of crudely chipped stone. Length 6.6 cm. Found close to the E. side wall, 15 cm. below the roof.
- d. (Pl. 50, Fig. 7). Partially worked, chipped stone implement with broad, rounded blade and long stem. Length 11.6 cm. Found fairly close to the W. side wall, 15 cm. below the roof.



- e. (Pl. 50, Fig. 5). Partially shaped, chipped, crude stone implement. Length 11.6 cm. Found fairly close to the W. side wall, at the very bottom.
- f. (Pl. 50, Fig. 6). Polished stone celt with almost elliptical section; the edge is slightly rounded, the base broken off. Found close to e. Length 5.7 cm.

Grave 12. (Fig. 377). Rectangular cist. Length 1.65 m. breadth 0.75 m., depth 0.36 m.

Grave 13. (Fig. 378 A). Oblong cist, joined to Grave 14. Length 0.95 m., breadth about 0.7 m., depth 0.27 m. Contained:

- a. (Fig. 379). Large, shallow, tripod bowl with almost upright walls. Colour, red. The walls are adorned on the outside with three panels containing large hook ornaments painted in brown. Height 12 cm. Diam. 18 cm. Found standing in S. W. corner, 5 cm. below the roof. Broken.
- b. Nearly globular vessel with narrow mouth and upright rim and adorned with four projecting knobs high on the shoulder. Resembles Pl. 49, Fig. 10. Colour, red; it is darkened by soot. Height 9.2 cm. Diam. 12.2 cm. Found lying on its side fairly close to a, 12 cm. below the roof. Broken.
- c. (Pl. 49, Fig. 3). Partially shaped, flat, notched and crudely chipped axe of stone. Length 10.3 cm.
- d. (Pl. 49, Fig. 4). Vessel-stand of clay with three small animals' heads at the upper rim. Each half has three perforations (for suspension?). Colour, whitish. Height 6 cm. Diam. 10.8 cm. Found near the S. corner, 15 cm. below the roof.



Fig. 380. — (1/2)

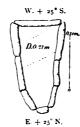


Fig. 381. Grave 15.

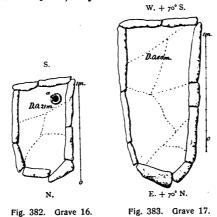
Grave 14. (Fig. 378 B). Square cist with double walls, adjoining Grave 13. Length of each side about 0.8 m., depth 0.32 m. Contained:

- a. (Pl. 50, Fig. 3). Pitcher with a narrow mouth; the rim is lost. Colour, red. Height 9.2 cm. Diam. 12.2 cm. Found lying on its side close to the S. side wall, 15 cm. below the roof.
- 6. (Fig. 380). Shallow bowl with somewhat rounded bottom and curved walls. The base of the walls is notched all round. Colour, red. Height 5.3 cm. Diam. 11.8 cm. Found standing 10 cm. from the W. end wall.
- c. (Pl. 50, Fig. 1). Human head of basalt lava. Height 12.7 cm. Found lying on its side in the S. W. corner, 25 cm. below the roof.
  - d. Particles of red pigment.

Outside the cist, almost on the top of the roof, there was found lying:

e. (Pl. 50, Fig. 2). Circular table of basalt lava, the top somewhat concave and adorned with knobs (animals' heads) round the lower margin of the rim.

Grave 15. (Fig. 381). Triangular cist. Length 1 m., breadth at the W. end 0.5 m., depth 0.27 m.



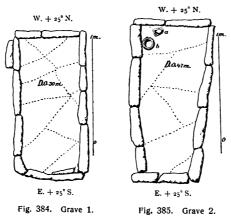
Grave 16. (Fig. 382). Rectangular cist. Length 1.1 m., breadth 0.7 m., depth 0.2 m. Contained:

a. Globular, tripod vessel with wide mouth and broad, flaring rim; ears formed of loops. On each side there is an animal's head in relief. Somewhat resembles Pl. 33, Fig. 7. Colour, red, but the upper part is tinged with cinnamon. Height 9 cm. Diam. 10.5 cm. Found standing near the S. W. corner, 10 cm. below the roof.

Grave 17. (Fig. 383). Almost rectangular cist. Length 1.6 m., breadth about 0.7 m., depth 0.6 m.

## GROUP II, OROSI.

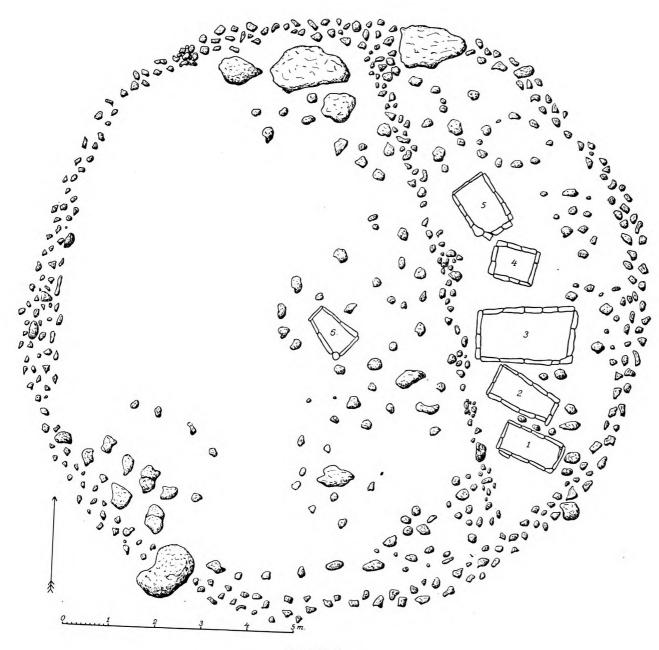
This group was contained in an almost circular stone enclosure, measuring about 12 m. in diameter. The whole platform was raised about one m. above the surrounding ground. During the course of our excavations here we came, at a depth of about a metre from the surface, upon a row of stones dividing the circle; its direction was approximately due N.—S. In the smaller of the two segments there were five cists, in the larger only one. These all lay at about one m. below the surface. The graves were:



Grave 1. (Fig. 384), Rectangular cist. Length 1.4 m., breadth 0.7 m., depth 0.3 m.

Grave 2. (Fig. 385). Rectangular cist. Length 1.55 m., breadth 0.8 m., depth 0.5 m. Contained:

a (Pl. 53, Fig. 6). Human flute-playing figure of stone, in sitting posture; head, oblong, flattened. Height 10.6 cm. Found standing in the S. W. corner at the very bottom of the grave.



Group II, Orosi.

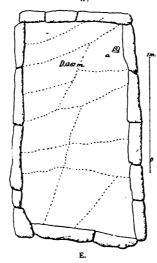


Fig. 386. Grave 3.

b. (Pl. 53, Fig. 1). Wide-mouthed, flattened, tripod bowl, with rounded bottom, two ears and a notched ridge round the shoulder. Legs missing. Colour, red. Height 8.2 cm. Diam. 11.2 cm. Found standing at the bottom, in the S. W. corner of the grave.

Grave 3. (Fig. 386). Rectangular cist. Length 2.25 m., breadth about 1.25 m., depth 0.65 m. Contained:

a. (Pl. 53, Fig. 5). Human head of clay with a pair of parallel linear incisions below the eyes. Apparently a portion broken off a large vase. Colour, red. Length of face 8.2 cm. Found very near the N. W. corner.

Grave 4. (Fig. 387). Almost square cist. Length 1.05 m., breadth 0.8 m., depth 0.6 m.

Grave 5. (Fig. 388). Rectangular cist. Length 1.15 m., breadth 9.9 m., depth 0.55 m. Contained:

a. (Pl. 53, Fig. 2). Polished stone celt, elliptical in section, with curved edge. Length 10 cm. Found quite close to the N. W. corner and at 10 cm. below the roof.



Fig. 387. Grave 4.

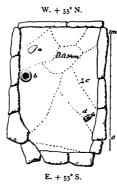


Fig. 388. Grave 5.

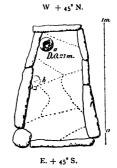


Fig. 389. Grave 6.

6. (Pl. 53, Fig. 3). Depressed globular bowl of unusually thick ware. Colour, red. Height 7.7 cm. Diam. 11.2 cm. Found close to the middle of the W. side wall, 20 cm. below the roof.

c. Leg of a clay vessel. Length 4.4 cm. Found 10 cm. from the E. side wall, 34.5 cm. below the roof.

d. (Pl. 53, Fig. 7). Handle of a spoon. Length 9.8 cm. Found fairly close to the E. side wall, 30 cm. below the roof.

Grave 6. (Fig. 389). Cist in the shape of a truncated triangle. Length 1.1 m., breadth at the N. W. end 0.45 m., at the S. E. end 0.8 m., depth 0.27 cm. Contained:

a. (Pl. 53, Fig. 8). Globular, tripod bowl with two ears at the rim. Immediately below the rim on each side there is an incised band with chequer decorations, flanked by vertical, parallel lines. Colour, red. Height 77 cm. Diam. 11.7 cm. Found in the W. corner, near the bottom.

b. (Pl. 53, Fig. 4). Crudely chipped, notched, stone implement. Length 10.7 cm. Found near the S. W. side wall, 20 cm. below the roof.

## GROUP III, OROSI.

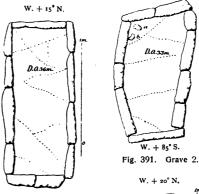
This group was one of the smallest stone-circles in the field, measuring only about 10 m. in diameter. It was raised about one metre above the ground. At the W. side there was what seemed to be a short pathway, bordered by rows of stones. In this group there were only 4 stone cists, lying at the depth of about one m, below the surface. A number of sporadic stone chips and fragments of pottery were met with. Two of the latter are shown on Pl. 54, Figs. 9, 10. The graves were as follows:

Grave 1. (Fig. 390). Rectangular cist. Length 1.6 m., breadth 0.7 m., depth 0.36 m.

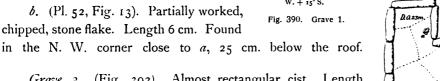
Grave 2. (Fig. 391). Oblong cist. Length 1.4 m., breadth about 0.7 m., depth 0.33 m. Contained:

a. (Pl. 52, Fig. 14). Part of a crudely chipped, stone implement, found in the N. W. corner, 8 cm. below the roof.

b. (Pl. 52, Fig. 13). Partially worked, chipped, stone flake. Length 6 cm. Found

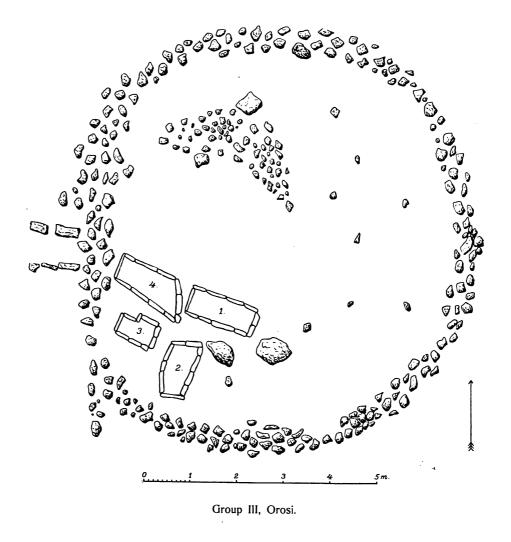


W. + 15° S.



Grave 3. (Fig. 392). Almost rectangular cist. Length 1 m., breadth at the W. end 0.45 m., at the E. end 0.7 m., depth 0.2 m. Contained:





a. (Pl. 52, Fig. 12). Small human figure of basalt lava in a sitting posture, with a smaller one on its back. Much weathered. Height 6.3 cm. Found lying close to the N. side wall, 25 cm. from the W. end wall and 8 cm. below the roof.

Grave 4. (Fig. 393). Oblong cist. Length about 1.75 m., breadth at the end about 0.6 m., depth 0.42 m. Contained:

a. Bowl, hemispherical, tripod, of yellowish colour and adorned with simple geometrical designs in red. Resembles in general shape Fl. 73, Fig. 1. Height 12.4 cm. Diam. 18.8 cm. Found standing at the W. end, 30 cm. below the roof.

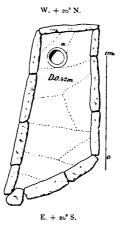


Fig. 393. Grave 4.

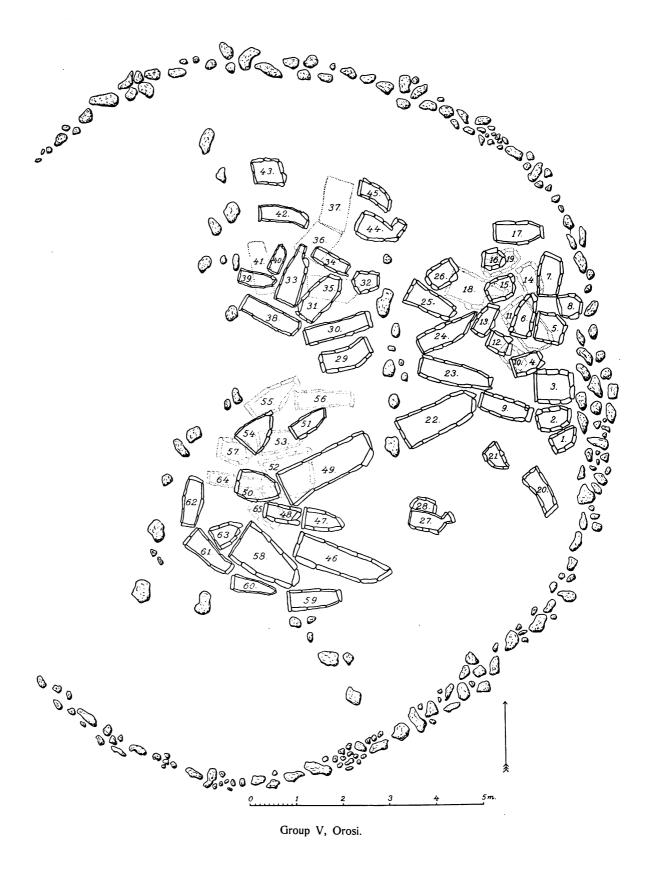
## GROUP IV, OROSI.

Stone circle, marked IV on the General Plan, about 10 m. in diam. and at a level with the surrounding ground. This group was opened by Masís and contained a few cists. These yielded objects of only little interest as regards form and ornamentation. The only one worth mentioning is a fragment of a clay vessel, presumably representing a tail. See Pl. 54, Fig. 2.

# GROUP V, OROSI.

This stone circle was one of the largest in the whole field and also the tallest of them all. It measured about 18 m. in diameter and was 2—3 m. high. It contained a large number of stone cists. Of these 65 were examined; they were crowded together in three groups, occurring in places in two storeys; 16 out of the total number belonged to the lower storey, which was met with immediately below the first. The E. portion of the mound showed trenches and holes left by previous diggings; this part was left to my men to excavate while I was busy exploring higher up the valley. This mound proved to be the richest in finds of all those excavated in the highlands. The following graves were examined:

Grave 1. (Fig. 394). Small oblong, irregular cist. Length 0.75 m., breadth 0.3 m., depth 0.23 m.

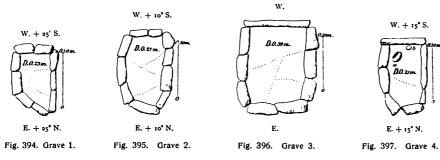


Grave 2. (Fig. 395). Oblong cist. Length 0.65 m., breadth about 0.35 m., depth 0.27 m.

Grave 3. (Fig. 396). Almost square cist. Length 0.75 m., breadth 0.55 m., depth 0.39 m.

Grave 4. (Fig. 397). Oblong cist. Length 0.6 m., breadth 0.3 m., depth 0.21 m. Contained:

- a. Bowl, plain, depressed globular, with wide mouth. Colour, red. Resembles Pl. 49, Fig. 8. Height 6.3 m. Diam. 9.7 cm. Found lying on its side in the S. W. corner, 12 cm. below the roof.
- b. Polishing-stone, oblong. Length 5 cm. Found near the W. end wall, 10 cm. below the roof.



Grave 5. (Fig. 398). Cist, nearly square. Each side about 0.5 m. Depth 0.3 m.

Outside the cist but close to the W. end wall there was a cylindrical jug (Pl. 54, Fig. 1) with a funnel-shaped mouth and with five successive constrictions of the body. It was found standing at only a short distance above the level of the roof. This vessel is one of the very few of this type obtained in Costa Rica. The uppermost ridge is adorned all round with small punctate markings. Colour, red. Height 11.6 cm. Diam. about 9 cm.

Grave 6. (Fig. 399). Almost triangular cist. Length 0.85 m., breadth at the S. W. end 0.35 m., depth 0.21 m. Contained:

a. Bowl, depressed globular, with narrow mouth. Resembles Pl. 21, Fig. 14. Colour, yellowish. The shoulder is adorned with crude, vertical streaks of a reddish colour. The vessel is blackened with soot. Height 8.4 cm. Diam.



Fig. 398. Grave 5.

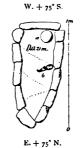
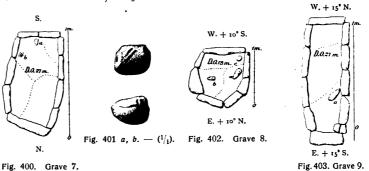


Fig. 399. Grave 6.

Found turned upside down in the S. W. corner, 10 cm. below 12.2 cm. the roof.

b. (Pl. 54, Fig. 5). Spoon of clay. The handle shows a small human figure in relief, lying on its back; the legs are swathed. The end of the spoon has the shape of a reptile's head. Length 15 cm. Found lying near the middle of the W. side wall, 12.5 cm. below the roof.



Oblong cist. Length 0.85 m., breadth about 0.4 m., Grave 7. (Fig. 400). depth 0.27 m. Contained:

- a. (Pl. 54, Fig. 6). Celt of aphanite, polished, with flat faces and sharpedged sides. Cutting-edge curved. Length 5.7 cm. Found close to the S. end wall.
- b. (Fig. 401 a, b). Ten beads, cylindrical, made out of a shell. Colour, white. Length about 1 cm. Found near the S. W. corner.

Outside the cist but close to the S. E. corner and at about the level of the roof there lay a vessel (Pl. 34, Fig. 9) with globular body and long, cylindrical neck; the base is annular, low and narrow. Round the base of the neck there runs a roughly modelled cord. The shoulder is adorned with four rhomboid ornaments, painted in red on reddish white ground. Height 13.9 cm. Diam. 12.2 cm.

Grave 8. (Fig. 402). Almost square cist, each side about 0.45 m., depth 0.18 m. Contained:

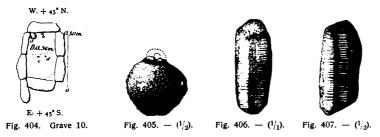
- a. (Pl. 54, Fig. 11). Oblong, crudely chipped, stone implement. Length 12 cm. Found near the N. side wall, 10 cm. below the roof.
- b. (Pl. 54, Fig. 4). Part of a crudely chipped, stone implement. Length 7.9 cm. Found near the S. side wall, 5 cm. below the roof.
- c. (Pl. 54, Fig. 3). Polishing-stone. Length 5.6 cm. Found in the N. W. corner, 10 cm. below the roof.

Grave 9. (Fig. 403). Rectangular cist. Length 1 m., breadth 0.3 m., depth 0.27 m. Contained:

a. Very crude, partially worked, chipped, stone implement. Length 14.1 cm. Found close to the N. side wall, 15 cm. below the roof.

Grave 10. (Fig. 404). Rectangular cist. Length 0.45 m., breadth about 0.25 m., depth 0.36 m. Contained:

- a. Small, depressed globular, tripod vessel with narrow mouth and two ears. On each side there is a quadrilateral field with incised geometrical designs, painted white. Resembles Pl. 21, Fig. 1. Colour, brown. Height 4.4 cm. Diam. 5.8 cm. Found turned upside down in the W. corner, 22 cm. below the roof.
- b. (Fig. 405). Half of a small copper bell. Length 8 cm. Found close to the W. end wall.
- c. (Fig. 406). Piece of crystal, oblong, partially rounded off by grinding. Length 2.7 cm. Diam. 8 cm. Found in the middle of the grave, 15 cm. below the roof.
- d. (Fig. 407). Piece of crystal, oblong, partially rounded off by grinding. Length 4.2 cm. Diam. 1.5 cm. Found quite near to c, in the middle of the grave, 15 cm. below the roof.



Grave 11. (Fig. 408). Rectangular cist. Length 1.1 m., breadth about 0.55 m., depth 0.57 m.

Grave 12. (Fig. 409). Rectangular cist. Length 0.4 m., breadth 0.3 m., depth 0.24 m. Contained:

- a. Diminutive globular vessel with wide mouth and flaring rim. Resembles Pl. 21, Fig. 4. Colour, red. Height 4.4 cm. Diam. 17.5 cm. Found in the N. W. corner, 12 cm. below the roof.
- *b.* (Pl. 55, Fig. 6). Diminutive, depressed globular vessel with small mouth.

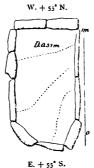






Fig. 409. Grave 12.

Colour, red. Height 4.6 cm. Diam. 5.7 cm. Found in the N. W. corner, 10 cm. below the roof.

c. Stone, flat and round, probably used for grinding. Diam. 10.8 cm. Found on the bottom, in the N. E. corner.

On the roof there stood a large, globular vessel (Pl. 55, Fig. 5), constricted about two thirds from the bottom and provided with two ears; it is decorated with an animal's head in relief on each side; the rim and shoulder are adorned with groups of parallel, reddish streaks. Ground colour, pale yellowish. Blackened with soot. Height 15.5 cm. Diam. 17.5 cm.

Grave 13. (Fig. 410). Oblong cist. Length 0.6 m., breadth about 0.25 m., depth 0.33 m.







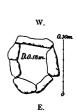


Fig. 410. Grave 13.

Fig. 411. Grave 14.

Fig. 412. Grave 15.

Fig. 413. Grave 16.

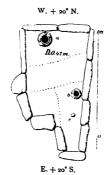
Grave 14. (Fig. 411). Rectangular cist. Length 0.6 m., breadth about 0.3 m., depth 0.42 m. Contained:

a. Stone implement, large, crudely chipped, tongue-shaped. Found lying near the bottom and fairly close to the N. E. side wall.

Outside the cist but near the N. corner and at a level with the roof there was found a very large globular vessel with wide mouth and flaring rim. Resembles Pl. 5, Fig. 6. On the shoulder there are two ears and an encircling cord. Colour, red. Height 21 cm. Diam. 30 cm.



E. Fig. 414. Grave 17.



J. Grave 17. Fig. 415. Grave 18.

Grave 15. (Fig. 412). Oblong cist. Length 0.55 m., breadth 0.35 m., depth 0.27 m.

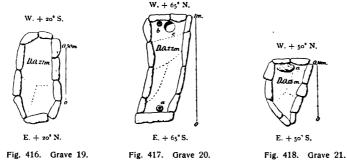
Grave 16. (Fig. 413). Nearly round cist. Length 0.35 m., breadth 0.25 m., depth 0.18 m.

Grave 17. (Fig. 414). Oblong cist. Length 1 m., breadth 0.33 m., depth 0.5 m.

Grave 18. (Fig. 415). Oblong, irregular cist. Length 1.15 m., breadth about 0.55 m., depth 0.42 m. Contained:

- a. Tripod, depressed globular vessel with wide mouth and with two animals' heads as ears on the shoulder; round the shoulder there runs a roughly modelled cord; the space between this cord and the low rim is adorned with four groups of similar transverse cords (three in each), alternating with groups of transverse bands in reddish brown paint. Legs very short. Colour, yellowish white. Blackened with soot. Height 9.7 cm. Diam. 14 cm. Found standing close to the W. end wall, 30 cm. below the roof.
- b. Nearly globular, wide-mouthed, plain vessel with two ears. Resembles in form of body Pl. 22, Fig. 8. Colour, red. Blackened with soot. Height 6.7 cm. Diam. 9.5 cm. Found 17 cm. below the roof near the N. side wall.
- c. Polishing-stone, round. Diam. 4 cm. Found near the N. side wall, 10 cm. below the roof.

Grave 19. (Fig. 416). Oblong cist. Length 0.75 m., breadth 0.3 m., depth 0.27 m.



Grave 20. (Fig. 417). Oblong cist. Length 0.9 m., breadth 0.3 m., depth 0.22 m. Contained:

- a. Small, depressed globular, tripod vessel with narrow mouth and two ears. At the base of the rim there are two rows of punctate markings. Resembles in general shape of body Pl. 9, Fig. 6. Colour, red. Height 5.4 cm. Diam. 6.3 cm. Found near the S. end wall, 5.4 cm. below the roof.
- b. Small, nearly globular, wide-mouthed vessel without any ornaments. Resembles Fig. 48 (p. 59 in the text). Colour, red. Height 5.6 cm. Diam. 5.1 cm. Found near the N. end wall, 10 cm. below the roof.
- c. (Pl. 55, Fig. 1). Bowl, hemispherical, on annular base. Height 5.2 cm. Diam. 10.5 cm. Colour, red. Found standing near the N. end wall, 8 cm. below the roof.

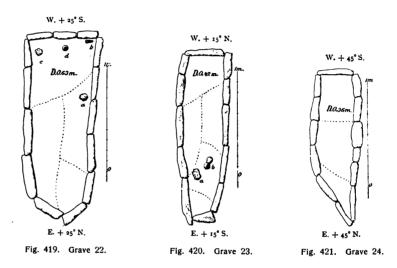
Grave 21. (Fig. 418). Nearly triangular cist. Length 0.55 m., breadth at the N. W. end 0.3 m., depth 0.15 m. Contained:

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a. (Pl. 55, Fig. 9). Stone implement, large, oblong, crudely chipped, unfinished(?). Length 16.2 cm. Found near the N. W. end wall, 8 cm. below the roof.

Grave 22. (Fig. 419). Nearly rectangular cist. Length 1.65 m., breadth about 0.55 m., depth 0.63 m. Contained:

- a. Part of a flat, thin, crudely chipped, stone implement. Length 8.2 cm. Found fairly close to the N. side wall, 35 cm. below the roof.
- b. (Pl. 54, Fig. 8). Celt of jasper, thin and flat, with round-edged sides; the cutting-edge is almost straight; well polished. Length 7.6 cm. Found in the W. corner, 25 cm. below the roof.



- c. Part of a flat, thin, crudely chipped, stone implement. Length 7.5 cm. Found in the S. W. corner, 22 cm. below the roof.
- d. Small vessel without ornaments; the lower half is hemispherical, the upper one almost conical, with narrow mouth and upright rim. Colour, reddish brown. Height 4.8 cm. Diam. 5.3 cm. Found fairly close to the W. end wall, 18 cm. below the roof.

Outside the cist and close to the W. end wall there were found two small rings of clay (Pl. 54, Fig. 7) with outer circumference not quite circular; at the angles there are a couple of small impressions. Diams. about 3.8 cm. Use unknown.

Grave 23. (Fig. 420). Rectangular cist. Length 1.5 m., breadth about 0.42 m., depth 0.42 m. Contained:

- a. Stone implement (resembling Pl. 55, Fig. 11), oblong, flat and thin, notched and crudely chipped, unfinished. Length 10.7 cm. Found near the E. end, 25 cm. below the roof.
- 6. (Pl. 55, Fig. 10). Stone implement, oblong, notched and crudely chipped. Length 12.5 cm. Found towards the E. end wall, 22 cm. below the roof.
- Grave 24. (Fig. 421). Oblong cist, pointed at one end. Length 1.35 m., breadth 0.3 m., depth 0.36 m.
- Grave 25. (Fig. 422). Oblong cist. Length 1 m., breadth about 0.35 m., depth 0.42 m. Contained:
- a. Celt of stone, nearly triangular, partly polished. Resembles Pl. 25, Fig. 9. Length 7.4 cm. Found towards the E. end, 22 cm. below the roof.
- 6. Stone implement, pointed at both ends, flat and notched all round. Resembles Pl. 60, Fig. 6. Length 14 cm. Found in the W. corner, 20 cm. below the roof.

Grave 26. (Fig. 423). Almost rectangular cist. Length 0.55 m., breadth 0.35 m., depth 0.3 m. Contained:

- a. (Pl. 55, Fig. 4). Small, almost cylindrical, tripod cup with upright walls and an animal's head in relief on each side. The interspaces are adorned with incised, geometrical designs. Colour, red. Height 5.5 cm. Diam. 4 cm. Found in the S. E. corner, 10 cm. below the roof.
- 6. Part of a crudely chipped, stone implement. Length 6.5 cm. Found in the N. E. corner, 17 cm. below the roof.

Baum Ja

Fig. 422. Grave 25.

i. Fig. 423. Grave 26.

- c. Crude chip of greenstone. Length 7.8 cm. Found in the N. corner, 15 cm. below the roof.
- d. Bead of jade, round, flat. Diam. 0.9 cm. Found in the N. E. corner on the bottom. This specimen and another bead met with in Grave 54 in the same group were the only objects of jade encountered during my excavations in the highlands. As is well known, jade was extensively used by the ancients on the Pacific coast.

On the roof at the W. corner of the cist there was found:

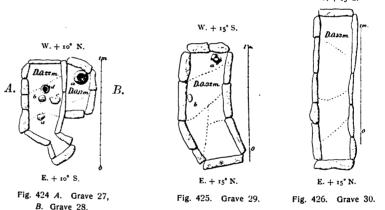
e. Bowl, large and shallow, tripod, of yellowish colour, adorned with simple geometrical designs painted in red. Legs in the shape of animals' heads. Resembles in general shape Pl. 24, Fig. 10. Height 14 cm. Diam. 20 cm.

Grave 27. (Fig. 424 A). Oblong, irregularly shaped cist. Length 0.9 m., breadth about 0.3 m., depth 0.22 m. Contained:

- a. (Pl. 55, Fig. 8). Part of a crudely chipped, stone implement. Length 7.2 cm. Found at about the middle of the grave and 7.5 cm. below the roof.
- b. (Pl. 55, Fig. 7). Oval, crudely chipped and unfinished (?) stone implement. Length 7 cm. Found fairly close to a. and at the same depth.
- c. (Pl. 55, Fig. 11). Notched, crudely chipped, stone implement, unfinished. Length 9.8 cm. Found fairly close to  $\delta$ . and near the N. side wall.
- d. Small tripod bowl with wide mouth and flaring rim; on one side it is adorned in relief with the broad face of some animal. Resembles Pl. 21, Fig. 10, but has no ears. Colour, red. Height 6.9 cm. Diam. 8.8 cm. Found at the bottom, fairly close to b.

Grave 28. (Fig. 424 B). Oblong cist. Length about 0.4 m., breadth 0.2 m., depth 0.17 m. Contained:

a. (Pl. 58, Fig. 11). Bowl of unusual shape with rounded bottom on a narrow, annular base. Colour, whitish; adorned with strange designs in reddish brown. Height 9.7 cm. Diam. 13.9 cm. Found in the N. W. corner, 5 cm. below the roof.



Grave 29. (Fig. 425). Oblong cist. Length about 1 m., breadth about 0.35 m., depth 0.32 m. Contained:

- a. Depressed globular, tripod bowl with wide mouth, flaring rim and two ears. Resembles Pl. 33, Fig. 4. Colour, red. Height 9.2 cm. Diam. 10.8 cm. Found lying on its side in the N. W. corner, 18 cm. below the roof.
- 6. Polishing-stone, oval and flat. Length 7.2 cm. Found fairly close to the S. side wall, 10 cm. below the roof.

Grave 30. (Fig. 426). Rectangular cist. Length 1.35 m., breadth 0.3 m., depth 0.53 m.

Grave 31. (Fig. 4271). Oblong cist. Length 0.7 m., breadth 0.3 m.

Grave 32. (Fig. 428). Short, irregular cist. Length about 0.3 m., breadth about 0.2 m. Contained:

a. Bowl, large, shallow, tripod. The exterior of the wall is adorned with a simple, geometrical pattern (Fig. 429) in yellow on a red ground, thrice repeated. Legs in the shape of an animal's head. Resembles Pl. 72, Fig. 8. Height 11 cm. Diam. 19 cm.

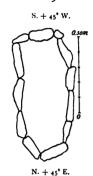


Fig. 427. Graves 31.

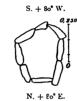


Fig. 428. Grave 32.

Fig. 429. — (1/3).



Fig. 430.

Grave 33.

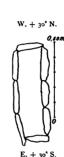


Fig. 431. Grave 34.

Grave 33. (Fig. 430). Oblong cist of irregular shape. Length 0.8 m.,

- a. (Pl. 49, Fig. 8). Vessel, globular, unusually large, with wide mouth and flaring rim. The shoulder and rim are adorned with groups of three parallel red streaks. Height 20 cm. Diam. 27 cm.
- b. Stone implement, oblong, polished. Resembles Pl. 68, Fig. 5. Length 15.4 cm.
  - c. Chip of greenstone. Length 8 cm.

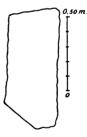
breadth about 0.25 m. Contained:

d. Chip of greenstone. Length 7.5 cm.

Grave 34. (Fig. 431). Rectangular cist. Length 0.55 m., breadth about 0.15 m.

Grave 35. (Fig. 432). Oblong cist. Length about 0.7 m., breadth about 0.35 m. Contained:

- a. Polishing-stone, oval, flat. Length 7.6 cm.
- b. Chip of greenstone. Length 9.2 cm.

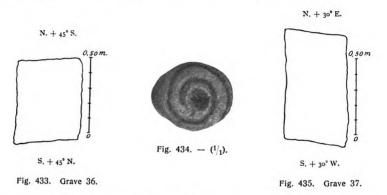


E. + 20° S. Fig. 432. Grave 35.

<sup>1</sup> Owing to the loss of a sheet with the original drawings upon it, this and a few other cists (Graves 31-45) of this Group have had to be copied from a drawing made for an exhibition and therefore only show the outlines of the cists.

Grave 36. (Fig. 433).

- a. (Pl. 56, Figs. 1, 2). Bowl, large, shallow, hemispherical, tripod, cream-coloured, with designs in red and black. The interior decoration consists of two triangular, human faces and two pair of arms. Compare Pl. 32, both for that and the outside decoration. The legs are broken off. Height of the body 7.1 cm. Diam. 28 cm.
- b. (Pl. 56, Fig. 3). Bowl of basalt lava in imitation of a jaguar. Length 24.5 cm.
  - c. (Fig. 434). Coil of clay. Use unknown. Diam. 2.7 cm.



Grave 37. (Fig. 435). Rectangular cist. Length 0.8 m., breadth 0.4 m. Contained:



Fig. 436. — (1/2).

- a. (Pl. 60, Fig. 4). Crude stone implement, nearly circular, chipped, unfinished (?). Diam. 1.4 cm.
- b. (Fig. 436). Small vessel, depressed globular, with narrow mouth. On the shoulder there are two small faces in relief, one on either side. Colour, red. Broken; rim lost. Height about 8 cm. Diam. 9.5 cm.

Grave 38. (Fig. 437). Rectangular cist. Length 0.95 m., breadth about 0.25 m. Contained:

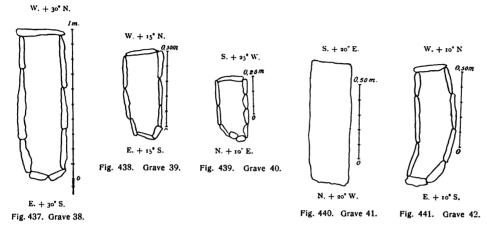
- a. (Pl. 60, Fig. 9). Pitcher with nearly globular body, adorned with a punctate ridge round the upper part; mouth narrow; rim flaring. Colour, red. Height 10.8 cm. Diam. 10.2 cm.
- b. Vessel, small, nearly globular, resembling Pl. 5, Fig. 9. Colour, red.
   Blackened with soot. Height 6 cm. Diam. 6.8 cm.

Grave 39. (Fig. 438). Rectangular cist. Length 0.5 m., breadth 0.2 m.

Grave 40. (Fig. 439). Oblong cist. Length 0.35 m., breadth about 0.15 m.

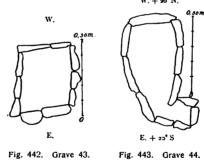
Grave 41. (Fig. 440). Rectangular cist. Length 0.8 m., breadth about 0.3 m.

Grave 42. (Fig. 441). Oblong cist. Length 0.7 m., breadth about 0.25 m.



Grave 43. (Fig. 442). Rectangular cist. Length 0.4 m., breadth about 0.35 m. Contained:

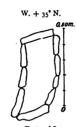
- a. (Pl. 57, Fig. 1). Bowl of clay, oval, shallow; imitation of a jaguar. The incised geometrical ornaments apparently represent the spots on the jaguar's skin. Colour, red. Mutilated, three legs lost. Height 7 cm. Length about 16 cm.
- b. Celt, polished, with oval section and somewhat curved edge. Resembles Pl. 28, Fig. 6. Length 9 cm.
- c. (Pl. 60, Figs. 1—3; Figs, 1 and 2 magnified 21/2 times). Beads (14) of glass, normal. Millefiori, rounded and oblong, with about six facets ground at each end. Each bead is as a rule composed of six layers: first a thin, central tube of opaque white, then a somewhat thicker layer of transparent



greenish white, then again a thin opaque white layer, followed by a thicker red one, then a thin opaque white one, and lastly a blue layer. Length 4-9 cm.

Grave 44. (Fig. 443). Oblong cist of irregular shape. Length 0.61 m., breadth about 0.3 m. Contained:

- a. (Pl. 60, Fig. 7). Crude, stone implement, unfinished, mutilated. Length about 15 cm.
- b. (Pl. 60, Fig. 6). Stone implement, oblong, flat and thin, polished; it has notches all round the edges, except at the middle, where the handle was fastened. This specimen still shows all round the middle plain marks of discoloration due to hafting. Length 17 cm. Thickness at the middle 2.5 cm.



E. + 35° S. Fig. 444. Grave 45.

W. + 20° N.

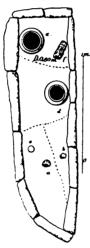


Fig. 445. Grave 46.



Fig. 446. Grave 47.

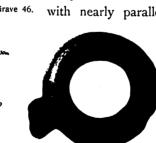


Fig. 447. —  $\binom{1}{1}$ .

Grave 45. (Fig. 444). Oblong cist. Length 0.45 m., breadth about 0.2 m.

Grave 46. (Fig. 445). Oblong cist. Length 2 m., breadth about 0.5 m., depth 0.6 m. Contained:

- a. Chip of greenstone. Length 7 cm. Found fairly near to the W. end of the grave, 30 cm. below the roof.
- b. Chip of greenstone. Length 6.9 cm. Found fairly close to a, near the N. side wall, and at 30 cm. below the roof.
- c. (Pl. 60, Fig. 8). Stone, cylindrical, polished smooth on all sides, probably itself used for polishing. This was the only one of the kind met with during my excavations in Costa Rica. Height 5.1 cm. Diam. 6.2 cm. Found fairly close to a, near the S. side wall, and 18 cm. below the roof.
- d. (Pl. 60, Fig. 10). Unusually large, crude cookingvessel of globular shape, and with high upright rim. Colour, red. Blackened with soot Height 19.7 cm. Diam. 22.9 cm. Found standing close to the N. side wall, 7 cm below the roof.
- e. Unusually large, crude cooking-vessel, resembling d but with narrower rim. Colour, red. Blackened with soot. Found standing close to the S. side wall, near the W. end of the grave and 3 cm. below the roof.

f. (Pl. 60, Fig. 5). Stone implement, crudely chipped, with nearly parallel sides and straight edges at both ends.

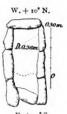
Length 17.7 cm., thickness 2.5 cm. at the middle. Found close to the N. side wall, near the W. end and 45 cm. below the roof.

Grave 47. (Fig. 446). Nearly triangular cist. Length 0.8 m., breadth at the W. end 0.3 m., depth 0.37 m. Contained:

- a. Chip of greenstone. Length 10.5 cm. Found near the E. end, 20 cm. below the roof.
- b. (Pl. 55, Figs. 2, 3). Human head of stone, admirably executed, neck cut off clean at the base and polished. Height 10 cm. Found standing on the bottom, near the W. end wall.
- c. (Fig. 447). Ring of clay with head and legs of an animal in relief. Use unknown. Diam. 3.9 cm. Found in the N. W. corner, 12 cm. below the roof.

Grave 48. (Fig. 448).

Outside the cist, near the W. corner and at about 30 cm. above the level of the roof, there was found an unusually large, nearly hemispherical vessel, somewhat incurved at the top; rim Fig. 448. Grave 48. flaring (Fig. 449). Colour, red. Height 27 cm. Diam. 32 cm.



W. + 25° S.



Fig. 449. -(1/3).

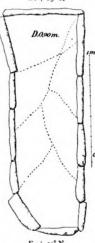


Fig. 450. Grave 49.

Grave 49. (Fig. 450). Nearly rectangular cist. Length 2.1 m., breadth about o.6 m.

Grave 50. (Fig. 451). Oblong cist. Length 0.85 m., breadth about 0.5 m., depth 0.54 m.

Outside the cist, close to the N. side wall and nearly at a level with the roof, there was found the upper portion of an unusually large vessel with broad, flaring rim. (Pl. 57, Fig. 6). Height 20.5 cm. Diam. 25 cm.

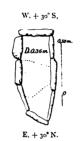


Fig. 451. Grave 50.

Grave 51. (Fig. 452). Oblong cist. Length 9.8 m., breadth about 0.3 m., depth 0.36 m.

Grave 52. (Fig. 453). Almost square cist with the sides about 0.9 m. in length, depth 0.62 m. Contained:

- a. (Fig. 454). Small wide-mouthed bowl, depressed globular, with a row of circular markings round the shoulder; rim narrow. Colour, red. Height 6.7 cm. Diam. 10.5 cm. Found in the S. E. corner, 15 cm. below the roof.
- b. Oblong, flat, thin, crudely chipped, unfinished implement of greenstone. Length 11.8 cm. Found in the N. W. corner, 5 cm. below the roof.
- c. Celt of stone, polished, with oval section; edge mutilated. Resembles Pl. 28, Fig. 6. Length 10.3 cm. Found in the N. W. corner, 35 cm. below the roof.





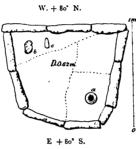


Fig. 453. Grave 52.



Fig. 454. — (1/2).

Outside the cist, close to the N. end wall and a little above the roof, there stood a fairly large, shallow tripod bowl of a red colour. Resembles Pl. 20, Fig. 2 in the shape of the body. The legs are like Pl. 45, Figs. 7, 8. Height 10.8 cm. Diam. 17.7 cm.

Grave 53. (Fig. 455). Oblong cist. Length 0.85 m., breadth at the W. end 0.4 m., depth 0.36 m.

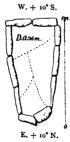


Fig. 455. Grave 53.

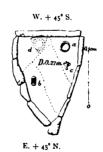


Fig. 456. Grave 54.

Grave 54. (Fig. 456). Triangular cist. Length 0.8 m., breadth at the S.W. end 0.6 m., depth 0.27 m. Contained:

a. Small bowl, shallow, plain, with rounded bottom. Resembles Pl. 27, Fig. 3. Colour, red. Height 4.8 cm. Diam. 9.2 cm. Broken. Found in the W. corner, 12 cm. below the roof.

- b. (Fig. 457). Cylindrical implement of stone with longitudinal furrows all round the body; ends somewhat narrowed. Length 9 cm. Diam. 5.7 cm. It is the only one of its kind I came upon in Costa Rica. Found on the bottom, near the N. side wall.
- c. (Fig. 458). Piece of the columella of a large marine univalve (Murex sp.). Length 6.7 cm. Found 10 cm. below the roof. — Close to c was found a rounded piece of a large marine univalve (Tridacna gigas?). Diam. 4.5 by 4 cm.
- d. (Fig. 459). A cylindrical bead of jade. Length 1.6 cm. Diam. 1 cm. Found close to the bottom in the W. corner.

Outside the cist, on the top of the roof and near the W. end, was found a large tripod vessel (Pl. 57, Fig. 8), almost conical in shape and with a wide mouth. The legs very tall and widely extended; each has a bird-like figure in relief and two longitudinal slits, one on either side. Colour, red. Height 8.7 cm. Diam. 5.4 cm.

Grave 55. (Fig. 460). Oblong cist. Length 1.1 m., breadth about 0.35 m., depth 0.47 m.

Grave 56. (Fig. 461). Rectangular cist. Length 1.35 m., breadth about 0.3 m. depth 0.42 m. Contained:







Fig. 458. — (1/2).

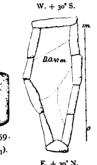


Fig. 460. Grave 55. Fig. 461. Grave 56.

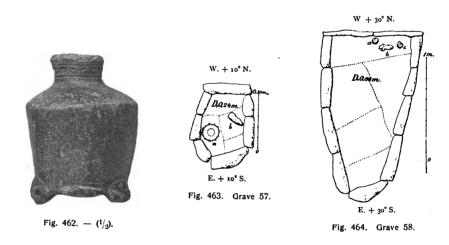
- a. Crudely chipped piece of greenstone. Length 7.5 cm. Found near the S. side wall, 8 cm. below the roof.
- b. Stone-celt, polished, with oval section; edge curved. Resembles Pl. 61, Fig. 5. Length 11.4 cm. Thickness 3.1 cm. Found near the N. side wall, 20 cm. below the roof.
- c. (Fig. 462). Small, octagonal bottle with short, cylindrical neck and three small feet. Colour, red. Height 8.2 cm. Diam. 6.5 cm. Found standing near b, 30 cm. below the roof.

About 15 cm. above the roof at the N. W. corner of the cist there was found an unusually large, depressed globular vessel d, with wide mouth and flaring rim. Shoulder and rim are adorned with crude, red streaks. Resembles Pl. 49, Fig. 8. Height 20.2 cm. Diam. 27.5 cm. Broken. Close to d, at about the same height above the roof, there was found another, somewhat smaller, vessel of a similar shape but with rim bent outwards. This vessel shows on the shoulder five equidistant groups of red, vertical, parallel streaks, three streaks in each. Height 14 cm. Diam. 17.5 cm. Broken.

Grave 57. (Fig. 463). Oblong cist. Length 0.55 m., breadth 0.35 m., depth 0.24 m. Contained:

a. (Pl. 57, Fig. 7). Stone implement in the shape of a celt with a very thin (1.4 cm.) blade of almost triangular shape. Length 16.2 cm. Found close to the N. side wall, 20 cm. below the roof.

Outside the cist, about 12 cm. above the roof at the S. side, there was found a vessel-stand resembling Pl. 7, Fig. 5, but without any cord round the neck. The upper rim is adorned with knobs all round. Colour, reddish white with simple bands in red paint. Height 7.1 cm. Diam. 12.5 cm.



Grave 58. (Fig. 464). Almost triangular cist. Length 1.4 m., breadth at the W. end 0.75 m., at the E. 0.3 m., depth 0.66 m. Contained:

a. (Pl. 57, Fig. 5). Crudely chipped, nearly circular, stone implement, unfinished (?). Diam. 5.9 cm. Found close to the W. end wall, 37 cm. below the roof.

b. (Pl. 57, Fig. 4). Piece of greenstone, crudely chipped. Length 7 cm. Found close to a and at about the same depth.

c. (Pl. 57, Fig. 3). Stone implement, notched, crudely chipped, unfinished (?). Length 15.3 cm. Found close to c, at about the same depth.

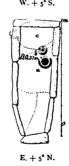
Grave 59. (Fig. 465). Almost rectangular cist. Length 1.05 m., breadth about 0.3 m., depth 0.37 m. Contained:

- a. Depressed globular, wide-mouthed, tripod vessel, with two ears and adorned on each side with an animal's face in relief, flanked by an oblique incised band with punctate markings. The legs are in the shape of a small biped. Resembles as to the body Pl. 33, Fig. 3, as to the legs Pl. 33, Fig. 5. Colour, yellowish. Height 16.6 cm. Diam. 12.6 cm.
- b. (Pl. 58, Fig. 8). Small, depressed globular, tripod vessel with wide mouth, adorned on each side with a small human figure modelled in the round and with punctate bands and fillets with punctate markings. Colour, red. Height 7.2 cm. Diam. 7.1 cm.

On the roof at the W. end of the grave there was standing a large oval, flat, four-legged metate of basalt lava, an imitation of a jaguar. (Pl. 62, Fig. 4). The rim is adorned with incised ornaments, to represent the spots on the skin. Mutilated. Tail and portions of the legs missing. Height 8 cm. Length 43.7 cm.

Grave 60. (Fig. 466). Almost triangular cist. Length 0.9 m., breadth at the W. end 0.25 m., depth 0.3 m.

Outside the cist, near the W. corner and a little below the roof, there was standing a large, nearly cylindrical, tripod vessel of blackish colour (Pl. 59, Fig. 5). The exterior of the walls is covered with an ornamentation, consisting of four rows of rectangular fields, filled with criss-cross lines, inlaid with whitish paint and joined





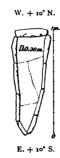


Fig. 466. Grave 60.

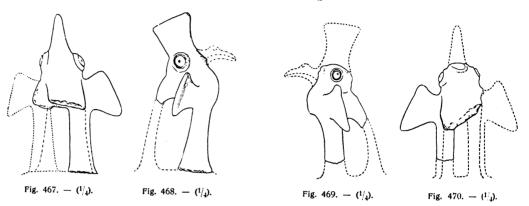
one to another by white, parallel lines, incised. The legs are in the shape of animals' heads. Height 14.3 cm. Diam. 13.6 cm.

At the N. corner, outside the cist, there were numerous potsherds and also some fragments of one or more large vessels of unusually thick red clay. These fragments were:

a. (Pl. 59, Fig. 4). The lower portion of a large vessel made of a sort of coarse-grained clay, mixed with white mineral particles; it has a high annular base and seems to have had a large handle on each side; the mark on the front

side probably indicates a beak (?), now lost; it has three vertical slits and is adorned with incised knobs (eyes) and oblique rows of punctate markings. Diam. 11 cm.

b. (Pl. 59, Fig. 1). Handle (?), modelled in the shape of a bird with two pointed projections on the top of the head. Height 21.3 cm.



- c. (Pl. 59, Fig. 3 and Figs. 467 and 468 in the text). Handle (?) in shape of a bird with outstretched wings and a wedge-shaped projection on the head; beak lost. Diam. of the body 7 cm.
- d. (Pl. 59, Fig. 2 and Figs. 469 and 470 in the text). Handle (?) in shape of a bird with outspread wings; beak and projection on the head lost. Diam. of the body 6 cm.
  - e. Fragment somewhat resembling d. Diam. of the body 7 cm.

Grave 61. (Fig. 471). Almost rectangular cist. Length 1.05 m., breadth about 0.35 m., about 0.45 m.

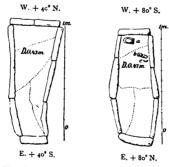


Fig. 471. Grave 61. Fig. 472. Grave 62.

- Grave 62. (Fig. 472). Oblong cist. Length 1 m., breadth about 0.3 m., depth 0.47 m. Contained:
- a. (Pl. 57, Fig. 2). The flute-playing god in basalt lava. Height 12.2 cm. Found in the S. corner, 25 cm. below the roof.
- b. (Pl. 57, Fig. 9). Oblong, crudely chipped, partially worked implement of greenstone. Length 17 cm., thickness 3 cm. Found near the W. side wall, 39 cm. below the roof.
- c. A fragment of the lower jaw with an incisor of *Dasyprochta* sp. Found near b, 15 cm. below the roof.

Grave 63. (Fig. 473). Triangular cist. Length 0.5 m., breadth at the W. end 0.4 m., depth 0.2 m. Contained:

a. Vessel, depressed globular, wide-mouthed, with an animal figure in relief on one side and an ear on the opposite. In the interspaces there are a pair of vertical, parallel cords. Resembles Pl. 22, Fig. 8, but is less depressed. Colour, red. Height 10 cm. Diam. 14 cm. Found in the S. W. corner, 10 cm. below the roof.

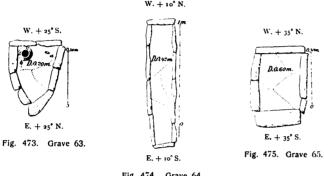


Fig. 474. Grave 64.

- b. Polishing-stone of crystal, oblong. Length 3 cm. Found in the W. corner on the bottom.
- c. Polishing-stone of crystal, oblong. Length 2.6 cm. Found close to b on the bottom.
  - d. Polishing-stone of crystal, oblong. Found close to c. Length 2.8 cm.

Grave 64. (Fig. 474). Rectangular, narrow cist. Length 1.15 m., breadth 0.2 m., depth 0.42 m.

Grave 65. (Fig. 475). Rectangular cist. Length 0.6 m., breadth 0.4 m., depth 0.60 m.

\* \*

In the soil above and between the graves we made some sporadic finds, such as fragments of clay vessels, chips, stone-implements, etc. Some of the more interesting ones are illustrated on Pl. 58 (Figs. 3, 4, 10), Pl. 60 (Fig. 11), Pl. 61 (all the Figs., except 3) and Pl. 62 (Fig. 3); they are also described in the

accompanying explanatory notes. The most noteworthy of them is a defective seal, provided with a small handle (Pl. 58, Fig. 3); it was the only one of the kind met with during my excavations in Costa Rica.

In the W. portion of Group V we came upon some trenches and holes, the results of previous diggings; that section, therefore, I left to my men to excavate and penetrated myself higher up the valley and to Carichi, an ancient pueblo not very far off, where there are still some Indians living. The portion of Group V I thus left, also proved to contain a number of cists, which were undisturbed. The finds there are illustrated on Pl. 58 (Figs. 5, 7), Pl. 59 (Figs. 6, 7), Pl. 61 (Fig. 3), Pl. 62 (Figs. 1, 2, 7, 8) and Pl. 63 (Figs. 1—4). Short descriptions are given in the explanatory notes to the plates.

Amongst the finds made there by my men were a couple of objects of unusual interest. They were found in two cists near each other; one consisted of a pair of discs of fire-clay, 0.5 cm. thick and 10 cm. in diam., fitted together and adhering one to another by means of a frame-work of burnt clay, only some remnants of which were still attached when the object came into my hands (Pl. 63, Figs. 1 and 2).

The surface of the upper disc (Pl. 63, Fig. 1) is flat on both faces but there are two circular holes (0.5 cm. in diam.) in the middle. On the under side these holes are joined with one another by a small furrow, the depth of which is about 0.2 cm. and the breadth 0.25 cm.

The lower disc (Pl. 63, Fig. 2, reproduces its under face) is plain, but on the under side it is divided into compartments by thin walls about 0.2 cm. in height.

When met with, the object was found adhering by its under side to the bottom slab of the cist and was loosened with the machete. The two discs were also adhering to each other when found, but were separated by the finders. Both discs show plain signs of exposure to great heat, being partially of a rusty appearance. The use of this object I am unable to state, but I imagine it has served for some metallurgic process, possibly for gilding thin copper-foil.

The other find was a number of pieces of gilded copper-foil, broken into fragments and found close to a broken skull. A piece of the skull is preserved and is coloured green from contact with the verdigris of the copper. The largest piece of the copper-foil is shown from both sides in twice its natural size on Pl. 63, Figs. 3 and 4.

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The very numerous circular or semicircular stone enclosures found at Orosi were undoubtedly of a domiciliary character, and in many of them the inhabitants evidently had workshops for the manufacture of tools and weapons out of the valuable material that was so abundant there. In only a few of these hut-rings do the ancients, however, seem to have buried their dead. The large circular enclosure, Group V, on the other hand, had served for a very considerable number of interments. When filling up the cists, the ancients, in the most careless fashion, had thrown in any stones and pebbles contained in the soil, and thus many chips and partially worked stone implements found their way into the cists without having been purposely deposited there. In recording the contents of the graves, I have of course noted down all stones artificially shaped and they have been preserved together with the other articles.

\* \*

On the E. side the court-yard (see p. 150) is limited by an oblong mound, 3-4 m. high, which slopes gradually towards the South. On the slope towards the court-yard there were standing three tall oblong stones of about 2 m. in height (marked e, f and g on the General Plan). In the N. E. corner of this mound previous diggers had opened a hole, and here they had found some large stone balls, of which 7 were now lying in the grass below. I had the hole reopened and my men excavated further down, where the soil was intact, with the result that another 10 were also unearthed. The soil contained scattered fragments of potsherds and charcoal, and at the depth of 5 m., at the base of the mound, we struck a large flat rock covered with coal-dust. Of the balls the largest ones measured about 15-35 cm. in diam. Concerning the purpose for which they have been used I can give no explanation. In several other localities in the Cartago valley similar stone balls have been found near the settlements of the ancient inhabitants. Another hole was opened near the opposite end of the mound to about the depth of 3 m. Here we also encountered fragments of pottery and portions of a skeleton in a state of decay.

East of the meadow with the stone circles in it, there was a coffee-plantation, in which were seen a number of more or less demolished stone circles. For fear of disturbing the roots of the coffee trees, we only opened some of the stone cists. Several heaps formed of stone slabs were seen in the field. The open ground between the young trees was to a great extent strewn with chips and flakes and with a considerable number both of partially worked and of complete stone implements. Especially did the curious form known as the \*turtle-back\* abound here. Chisels which had been used for cutting the stone slabs were also numerous.

Space does not admit of any description being given in this work of the

very rich material (about a thousand stone objects) which I collected in this one field.



Fig. 476.



Fig. 477. — (1/1). Fig. 478. — (1/1).

A number of the objects from the coffee-plantation are illustrated on Pl. 62, Figs. 5, 6 and 9, and on Pl. 64—69. One small object, a fragment of clay with circular ornaments in relief, is shown on Fig. 476 in the text. In one of the cists within the coffee-plantation Masís found a small golden bell which is in the possession of the owner of the hacienda. In another cist he met with a pair of small tubes of rolled copper sheet (Figs. 477 and 478).

In the same coffee-plantation there stood an upright flat stone, half a m. high, with petroglyphs, about 0.5 cm. deep, on its E. face. See Fig. 479.

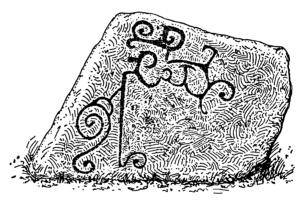


Fig. 479. Stone Slab with Petroglyphs. Orosi.

## V.

# COLLECTIONS OBTAINED BY PURCHASE FROM VARIOUS LOCALITIES IN THE CARTAGO VALLEY.

nly at the four localities above described did I undertake excavations myself on the high-lands. I succeeded, however, in obtaining not inconsiderable collections of specimens from the same district, the environs of Cartago, by purchase from the natives. The largest of these collections are those from Las Huacas, Navarro, Tarras and Agua Caliente.

#### LAS HUACAS.

From this locality came, as has been stated above, the large collection in the Vienna Ethnographical Museum. Masís conducted the digging there, with a large staff of men under him, over a period of some 9 months. He accompanied me up to the grave-field, which has the highest elevation of any I know of in Costa Rica. It is situated at the lower boundary of the wooded tract on the slope of Mt. Irazu, i. e. about one thousand metres above the valley. On a grass meadow, and just within the adjacent wood, were to be seen heaps of soil and stone as left after the excavations. The graves in this locality, I was informed, had all consisted of stone cists in small groups or clusters within stone enclosures, usually circular in form, but of varying dimensions. In several places the stone cists had been found in two or three storeys. The soil was a black loose mould resembling that at Chircot. The clay vessels met with were mostly in good preservation. The large collection from this locality above referred to, which I

had the opportunity of seeing at San José before its despatch to Europe, exhibited for the most part the types and forms so well known from other localities of the Cartago valley, though here and there a vessel displayed ornamentation pointing to alien extraction. A considerable quantity of stone figures and numerous "stools" had been met with, but comparatively few stone implements. Among the finds at that locality there were also some ornaments of gold. Skeletons were come upon in many of the cists. Out of the soil that had been turned out I got together a considerable quantity of potsherds, many of which had multicoloured and interesting ornamentation. At the side of the "carreta" road, which skirts the field, rainwater had laid a small stone cist bare, which I opened and found to contain a small pot with relief ornamentation upon it.

A man of the name of Fernando Mora, who was the owner of a plot of land adjacent to the field excavated by Masís, had contemporaneously collected







Fig. 481. —  $\binom{2}{1}$ .

a number of clay vessels on his own account, which he sold in Cartago. That collection I was enabled to become the possessor of by purchase. Among the specimens so acquired there were two large and richly adorned hemispherical, tripod bowls, of which representations will be found on Pl. 70 and 71 and descriptions in the notes appended to the plates. Other vessels and some large spoons etc. are reproduced on Pl. 72 and 73.

Fragments of clay vessels from Las Huacas with multicoloured ornaments are shown on Pl. 74, 75 and 76. I purchased, furthermore, a small copper image

(Fig. 480) from a tradesman in Cartago, who had bought it a few years before from a native who resided not far from Las Huacas. This image is coated with a thin gilding. A back view of it is shown in Fig. 481.

#### NAVARRO.

While I was busy packing up my collections during the rainy period in Cartago in January, I learnt that a tradesman in the town, who possessed a coffee hacienda at Navarro, had come upon a number of cists while the work of cultivation had been proceeding. He undertook to preserve all the objects found in the graves, and while the work was going on, he handed over direct from the field a considerable number of clay vessels, some stone chisels, etc. The vessels, which came into my hands without any previous cleaning, were as a rule small in size and very similar to those I found at Los Limones.

#### TARRAS.

In this locality Masís had been digging while I was staying on the East coast. He had found stone cists in a couple of low mounds, and in the cists there were a number of small and simple clay vessels, which I acquired.

#### AGUA CALIENTE.

Mention has been made above (p. 48) of the magnificent collections derived from this locality by the Troyo family. Only a comparatively small portion of the extensive grave-field was still intact at the time of my visit to the place, viz. a meadow containing a number of low and flat circular mounds of varying sizes. I made a tour through the coffee-plantations, the site of the excavations. Traces of the stone circles were to be seen in many places and also portions of stone

cists. The ground was strewn with numbers of potsherds, principally yellow and red, but I did not see any signs of chips and flakes or broken stone implements. Evidently the natives had not manufactured any at that locality. On a meadow not far removed from the grave-field I was shown a large block of stone, decorated with three spirals hewn into its surface. See Fig. 482.

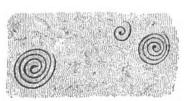
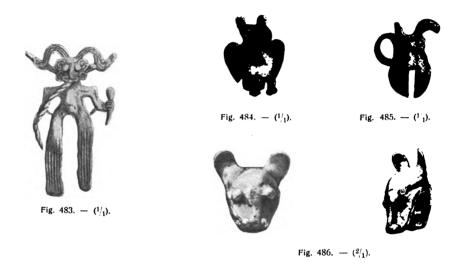


Fig. 482. Engravings on a Stone Block, Agua Caliente.

Señora Dolores Troyo, who very obligingly threw her museum open to me, also consented to dispose of a number of large broken bowls, which I valued for the sake of the ornaments upon them. Some of these vessels are reproduced on Pl. 77 (Fig. 2), Pl. 79 (Fig. 2, 3), Pl. 80 (Fig. 2), Pl. 81—85 and Pl. 87, and described in the notes accompanying the plates. A few other objects obtained on the same occasion are illustrated on Pl. 86. An Italian tradesman in Cartago had in his possession three recently purchased ornaments of gold, which he had obtained from native workmen of the neighbourhood. These objects had probably been found at Agua Caliente. I obtained permission to allow a Costa-Rican artist to sketch them. They are: a small human figure (Fig. 483) holding in one hand a rattle and in the other a rope extending from its mouth, an owl (Fig. 484) and a small bell with a loop for suspension. By purchase from a native living near the same locality I got a small golden jaguar's head (Fig. 486), which he had found in his field.



#### PAIS.

Masís made some excavations of stone cists in this locality during the rainy period, and sold a few of the finds to me. Some of these vessels are reproduced in Pl. 77 (Fig. 1), Pl. 78 (Figs. 1—4) and Pl. 79 (Fig. 1). One specimen (Pl. 78, Figs. 3, 4) is illustrated in order to show the above-mentioned method of painting with a comb-like instrument.

#### CONCLUSION.

In the foregoing work the results are detailed of a year's investigations within the province of the ancient culture of the Guëtares. Some of the chief seats of this bygone culture have been investigated with all the care and circumstance that have been feasible considering the difficulties in the path of the investigator in tropical regions. For the first time since archæological investigations began on the Isthmus proper, the finds in each of the different graves have been systematically kept together, and detailed notes have been made with the aid of the square-ruled paper method, with regard not only to the form and position of the graves and their direction in reference to the compass, but also to the place, position, etc. of the finds within or near them.

The task the writer has set before him has been merely to place before his readers, in as short and concise a manner as possible, the most important of those documents which have been collected from the archives of the burial grounds and mounds within a certain district in Costa Rica. Observations such as those recorded in the above work as to the state in which the ancient remains, more especially the graves, were found, and as to the character of the finds and the meaning and development of certain types of ornament occurring on them, must be regarded as about the utmost that can reasonably be demanded of a publication of this kind in the present state of knowledge regarding Central-American archæology.

Not until the Isthmus and the adjacent countries both to the North and the South shall have been by some future date thoroughly and methodically studied from every point of view, will it be possible to determine the limits of the culture under consideration here, to distinguish its peculiar characteristics from those shared by and borrowed from the cultures of other peoples, and so by degrees to arrive at a point where the interpretation of the obscure questions of the origin and development of this special form may safely be begun.

The culture to which the remains described in this work belong, proves to be that of a Stone Age people of high standing, possessed of ornaments of gold and copper, but with no tools or weapons of metal at all.

We have no data whatever to enable us to determine how far back into the past this culture reaches, but the presence of beads of glass in the graves goes to show that it continued to exist after the arrival of the Spaniards.

No traces of a yet more primitive culture were met with.

The graves of these regions are built with great care, and give evidence of having belonged to a people of an advanced stage of civilization. Pits without any roofs of slabs were only met with in one locality. In the highlands the ancients in constructing their graves, availed themselves fully of the plentiful supply of stone slabs. Lower down, on the Atlantic coast, the supply of suitable and easily transportable stone slabs was limited, and hence the natives there built the walls of the graves of the oval and flat river-stones which were easy to get at; heavy slabs they only employed for the roofs. Masís maintained that even quite high up in the mountain districts, for instance on the slopes of Mt. Turrialba (a volcano) graves were frequently found which resembled in construction those upon the East coast.

A highly interesting parallel in many particulars to the stone cist groups containing two or three storeys which I have described as existing in the highlands of Costa Rica, is to be found in Professor F. W. Putnam's essay, entitled. Archæological Explorations in Tennessee. Reports Peabody Museum, II, 1876—79, p. 306.

Stone cists are extant in several States in North-America, on the slopes of Mt. *Popocatapetl* in Mexico, at *Zaculen*, Guatemala, at *Chiriqui* on the Isthmus, and also in South-America, viz. at *Arayo* in the Cauca valley <sup>1</sup>.

The size and shape of the stone cists in Costa Rica vary very considerably. A very large number are from 6 to 7 feet in length, and in these — to judge from the position of the few skeletons left — the corpses were stretched out full length on their backs. Most of the cists, however, are quite too small for such to be the case; in these it is principally the skulls and the longer bones which have been deposited along with a few of the lesser bones.

This latter method, which seems to have been widely employed in America, is minutely described by Clarence B. Moore under the designation of bunched burials<sup>2</sup>.



Preuss: Die Begräbnissarten von Amerika». P. 69.

<sup>&</sup>lt;sup>2</sup> CLARENCE B. MOORE: Dertain Aboriginal Mounds of the Georgia Coast. Reprint from the Journ. of the Acad. of Nat. Sc. of Philadelphia, XI, 1897, p. 6.

This method has usually been connected with the aboriginal custom of exposing the dead body prior to inhumation until it was bereft of the flesh. Limited space forbids the insertion here, as had been intended, of a review of the burying customs of the present-day aboriginals of Costa Rica, but the reader may be referred to Dr. William M. Gabb's work: \*Tribus y lenguas indigenas de Costa-Rica\*, which contains the most complete description of them hitherto published.

The direction, as regards the points of the compass, in which the graves were found to lie, is not uniformly the same. The majority were placed more or less in that of E.—W., but others in many other directions.

Naturally the direction became of little importance in those cases where the bodies were not placed at full length, in natural order, but in receptacles so small as only just to give room for the skulls and some few bones deposited in heaps or bundles.

The normal shape of the stone cists found in Costa Rica is the rectangular one; irregularities in this particular, however, are to be noticed in numerous cases, where the spaces between the graves, of more or less irregular forms and sizes, have been subsequently used for new graves; this, together with the occasional presence of rocks firmly embedded in the ground, explains in most cases the fact of there being such a variety of shape in the graves, and also the occasional existence of very remarkable forms, as for example the triangular or truncated-triangular graves, and the disproportionately narrow, small, or even eccentric shapes of the stone cists here and there met with.

The objects of native art and industry obtained from the graves of the Guëtares, are made of clay, stone or metal. Only two implements of bone were found. As a rule they were met with within the cists, though in many cases in the soil above and between them. As has been pointed out above, a very large number of the average-sized and the small vessels, even when richly adorned with relief and painted ornaments, were blackened with soot. To the vessels found in these graves W. H. Holmes' remarks upon similar vessels from Chiriqui apply: "We cannot say with confidence whether that use was a domestic one or whether it was ceremonial. The small size and elaborate modelling of a majority of the pieces make it improbable that they were intended for use in ordinary cooking or even in the preparation of beverages. A few large plain caldrons are found, and these were probably domestic receptacles. All things considered, it would seem highly probable that the greater proportion of the vessels exhumed from the graves were intended to be used for religious and mortuary purposes".

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In Costa Rica this last supposition may be considered to apply with special force to the large bowls, which are copiously adorned with multicoloured ornaments representing conventionalized animal and human figures.

The clay vessels of the Guëtares bear witness to highly elaborated technique and cultivated taste, but do not include any types that come up to the best of the Chiriqui vessels in perfection of outline and elegance.

Of forms in earthenware imitative of life forms, there are to be found among the Guëtares, besides human figures, representations of monkeys, jaguars, birds, lizards (alligators?), turtles, crabs, etc.

The frequent occurrence of low or mezzo relief ornamentation is very noticeable. Small human or animal figures or, in the great majority of cases, heads modelled in the round, are often attached to the vessels as legs (feet), ears, or mere ornaments.

Of large painted multicoloured bowls with human and animal figures, more or less conventionalized, the Guëtares can show a very much larger number than the ancients of Chiriqui.

It is of interest to observe that certain classes of ornament seem to have been allotted to certain classes of vessels, thus the incised ornamentation only occurs on vessels of special forms.

The objects of stone art found in the Guëtar region, very closely resemble those found in the Chiriqui region. This branch of art seems, on the other hand, to have reached a higher stage of development among the Guëtares than among the Chiriquians, to judge especially by the numerous interesting specimens to be seen in the San José Museum. The unique work of art in stone, the \*mesa altar\* described by Dr. Juan Ferraz in his annual report for 1900¹, is the most remarkable of the finds made. There is no mention from the Chiriqui region of any statues of the imposing size of those I have described as found on the East coast in Costa Rica.

It is a characteristic of the Guëtares that no great amount of work was spent on the manufacture or adornment of metates; they seem to have been content with flat oval stones of crude workmanship, or to have made use of suitable natural boulders, often found on the banks of rivers etc., for grinding and crushing their grain, seeds, etc. The objects that resemble metates, and which are usually oval in form, sculptured in the shape of a jaguar and ornamented, show as a rule no signs of wear and have probably only served ceremonial purposes. On the Nicoyan peninsula, on the other hand, the ancients

<sup>&</sup>lt;sup>1</sup> JUAN F. FERRAZ. Informe rel. al año econ. de 1899 a 1900 del Museo Nacional de Costa Rica. San José 1900, p. 17.

were specially adept at the making of metates, and their productions surpass in both size and beauty anything to be found of the kind on the American continent.

Metal objects are only sparse among the Guëtares; they are, moreover, only ornaments of gold and copper.

The culture of the Guëtares is plainly composed of many elements and has been influenced from both South and North. It is to be hoped that with the prospect of the realization at an early date of the junction of the Atlantic and Pacific by canal across the Isthmus, the multifarious and varying cultures of these regions in Central America will attract the attention of archæologists in a higher degree than heretofore, and will then be investigated in all their differing phases. Should this work, then, serve to throw light upon the archæology of these regions, the labours of its author will not have been in vain.

## TABLE OF ERRATA.

Owing to oversights on the part of the English proof-reader first employed, certain typographical and linguistic errors appear in sheets 2-5 inclusive; some of these are here noted for the guidance of the reader.

р.	9, 1. 4	For:	The	Read:	On the		
_	9, l. 17 from foot	>>	ground	>	surface		
			might	2)	may		
	10, l. 2 from foot	•	aforenamed	3	above-mentioned		
,	13, 1. 6	,	Only the	»	The		
,	12, 1. 17	,	ground	»	surface		
>>	12, l. 6	»	ago	>>	before		
*	14, 1. 16	>>	some graves were	»	were a few graves		
»	15, l. 2	>>	The	»	Its		
>	15, 1. 3	»	side	>>	sides		
,	16, 1. 6	ν	seen	>>	as seen		
			by		of		
	19, 1. 6 from foot	3	has	»	had		
>	20, 1. 3 from foot	v	the same	>>	it		
>	21, 1. 6	*	by scratching	3	with incised work		
>	» l. 18	y	last	•	lastly		
3	» l. 18	ď	thicker	» ·	thicker one		
»	» l. 19	×	misnamed	»	incorrectly called		
لا	28, 1. 2 from foot	>	traces of bone were	>	were traces of bones		
»	• l. 2 from foot	>>	moulded	»	much mouldered		
»	29, l. 12	»	turning	,	turned		
>>	• l. 14 from foot	»	this as late as in	>>	thus as late as into		
ď	» 1. 9 from foot	•	so	»	very		
»	» 1. 7 from foot	<b>u</b>	of	>>	published at		
	30, l. 4	*	of	»	by		
»	34, l. I	×	practise	>>	practice		
»	» l. 14	*	when	*	whether		
Other inadvertences are:							
D.	65. 1. 4		west mad of concept				

p. 65, l. 4	For: west	Read: north
» 71, l. 7	» on the	» on the interior
» 74, 1. 8	» arms,	» arms and a cross design

# PLATES.

The photographic views are all taken by the author, except Plate 15, Fig. 1.

## PLATE 1.

Fig. 1. — The large mound near Mercedes, described on pages 8—10.

Fig. 2. — Idol, as found on the slope of the large mound, also reproduced on Plate 3, Fig. 3, description on p. 11.
(R. Ethn. Museum Cat. No. 1900. 3. — 1.38).

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1. THE LARGE MOUND NEAR MERÇEDES.



2. IDOL AS FOUND ON THE SLOPE OF THE LARGE MOUND.



1. THE LARGE MOUND NEAR MERÇEDES.



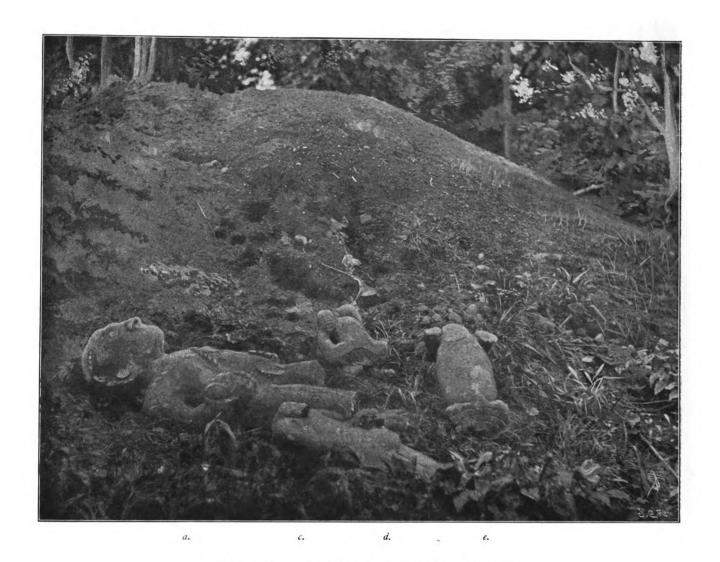
2. IDOL AS FOUND ON THE SLOPE OF THE LARGE MOUND.

## PLATE 2.

## IDOLS FOUND AT THE BASE OF THE LARGE MOUND.

- a. Human figure, also reproduced on Plate 3, Fig. 1. P. 10.
   (Cat. No. 1900. 3. 1.37).
- c. Human figure, with a head on the left shoulder. The head is reproduced on Plate 4, Fig. 2. P. 11.
- d. Human figure with incised double-spiral ornaments. Cfr. Fig. 3, P. 12, reproduced from sketch.
- e. Trunk of alligator. P. 12.





IDOLS FOUND AT THE BASE OF THE LARGE MOUND.

## PLATE 3.

- Fig. 1. One of the two larger, chief idols of the temple mound. ( $^{1}$ <sub>10</sub>). P. 10. (Cat. No. 1900. 3. 1.37).
- Fig. 2. Hat of the above mentioned idol. (½). Reproduction from a plaster cast. A drawing on a larger scale (½) is given in the text, Fig. 2. P. 10. (Cat. No. 1900. 3. 37b.).
- Fig. 3. Companion to the idol, Fig. 1. ( $^{1}_{-10}$ ). P. 11. (Cat. No. 1900. 3. 1.38).



2.



3.

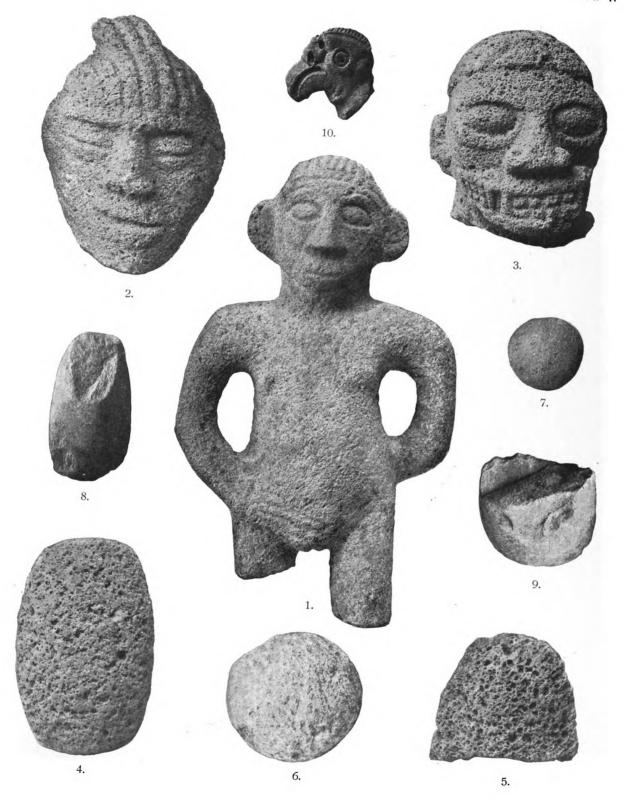
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#### PLATE 4.

- Fig. 1. Stone figure  $\binom{1}{2}$ , found in the mound E on the plan (Fig. 1 in the text). P. 13. (Cat. No. 1900. 3. 1.39).
- Fig. 2. Head of stone ( $\frac{1}{2}$ ), broken off from the back of Figure c on Plate 2. P. 11. (Cat. No. 1900. 3. 1.42).
- Fig. 3. Head of stone ( $\frac{1}{3}$ ), broken off, found in the mound F on the plan, (Fig. 1 in the text). P. 12. (Cat. No. 1900. 3. 1.41).

### OBJECTS FOUND SCATTERED IN THE SOIL OF THE LARGE MOUND.

- Fig. 4. Rubbing-stone of basalt lava.  $(\frac{1}{2})$ . P. 13. (Cat. No. 1900. 3. 1.43).
- Fig. 5. Fragment of a rubbing-stone.  $(\frac{1}{2})$ . P. 13. (Cat. N. 1900. 3. 1.44).
- Fig. 6. Ball of greenstone.  $(\frac{1}{2})$ . P. 13. Cat. No. 1900. 3. 1.50.
- Fig. 7. Polishing-stone.  $(\frac{1}{2})$ . P. 13. (Cat. No. 1900. 3. 1.53).
- Fig. 8. Celt of greenstone.  $(\frac{1}{2})$ . P. 13. (Cat. No. 1900. 3. 1.45).
- Fig. 9. Fragment of a celt of greenstone. ( $\frac{1}{2}$ ). P. 13. Cat. No. 1900. 3. 1.46).
- Fig. 10. Head of a bird (parrot?) of clay.  $\binom{1}{1}$ . P. 13. (Cat. No. 1900. 3. 1.92).



## PLATE 5.

Fig.	1. — Clay vessel. — (1/2). a in Grave 1, Merced (Cat. No. 1900. 3. — 1.1).	es. P. 17.
Fig.	2. — Clay vessel. — $\binom{1}{2}$ . $a$ in Grave 2, (Cat. No. 1900. 3. — 1.2).	P. 18.
Fig.	3. — Clay vessel. — $\binom{1}{2}$ . $b$ in Grave 2, (Cat. No. 1900. 3. — 1.3).	P. 18.
Fig.	4. — Clay vessel. — $(\frac{1}{2})$ . c in Grave 4, (Cat. No. 1900. 3 — 1.6).	P. 19.
Fig.	5. — Clay vessel. — $(1/2)$ . $a$ in Grave 4, (Cat. No. 1900. 3. — 1.4).	P. 19.
Fig.	6. — Clay vessel. — $(\frac{1}{2})$ . $\delta$ in Grave 4, (Cat. No. 1900. 3. — 1.5).	P. 19.
Fig.	7. — Glass bead. — $\binom{1}{1}$ . $c$ in Grave 5, (Cat. No. 1900. 3. — 1.9)	P. 21.
Fig.	8. — Clay vessel. — $(\frac{1}{2})$ . $d$ in Grave 5, (Cat. No. 1900. 3. — 1.10).	P. 22.
Fig.	9. — Clay vessel. — ( $\frac{1}{3}$ ). $\delta$ in Grave 5, (Cat. No. 1900. 3. — 1.8).	P. 21.
Fig.	10. — Clay vessel. — $\binom{1}{2}$ . $a$ in Grave 5, (Cat. No. 1900. 3. — 1.7).	P. 21.
Fig.	11. — Clay vessel. — $\binom{1}{2}$ . $e$ in Grave 5, (Cat. No. 1900. 3. — 1.11).	P. 22.
Fig.	12. — Leg of diminutive metate of stone. — (1/2). at Williamsburg. P. 40. (Cat. No. 1900. 3. — 1.95).	Found in the burial ground



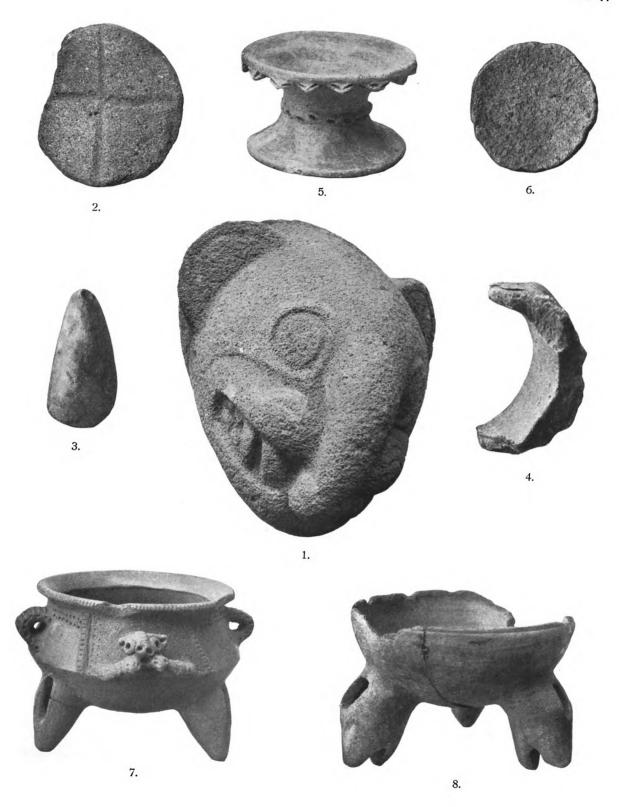
## PLATE 6.

Fig. 1. — Clay vessel. — $(\frac{1}{2})$ . $a$ in Grave 7, Mercedes. (Cat. No. 1900. 3. — 1.12).	P. 23.
Fig. 2. — Stone celt. — ( $\frac{1}{2}$ ). $b$ in Grave 7, (Cat. No. 1900. 3. — 1.13).	P. 24
Fig. 3. — Clay vessel. — $\binom{1}{2}$ . $a$ in Grave 8, (Cat. No. 1900. 3. — 1.14).	P. 24
Fig. 4. (a, b) — Clay vessel. — (1/2). a in Grave 11, (Cat. No. 1900. 3. — 1.17).	P. 26
Fig. 5. — Clay vessel. — $(\frac{1}{2})$ . $a$ in Grave 9, (Cat. No. 1900. 3. — 1.15).	P. 24
Fig. 6. — Whistle of clay. — ( $\frac{1}{1}$ ). $\delta$ in Grave 9, (Cat. No. 1900. 3. — 1.16).	P. 25
Fig. 7. — Clay vessel. — ( $\frac{1}{2}$ ). $a$ in Grave 12, (Cat. No. 1900. 3. — 1.18).	P. 26
Fig. 8. — Clay vessel. — ( $\frac{1}{2}$ ). $b$ in Grave 12, (Cat. No. 1900. 3. — 1.19).	P. 27.



## PLATE 7.

- Fig. 1. Head of a tapir, of stone.  $(\frac{1}{3})$ . Found among the stones outside Grave 10, Mercedes. P. 26. (Cat. No. 1900. 3. 1.131).
- Fig. 2. Clay disc. ( $\frac{1}{1}$ ). Found in the soil outside a grave, Mercedes. P. 28. (Cat. No. 1900. 3. 1.103).
- Fig. 3. Stone celt.  $(\frac{1}{2})$ . Found in the soil outside a grave, P. 28. (Cat. No. 1900. 3. 1.95).
- Fig. 4. Potsherd, crude.  $\binom{1}{3}$ . Found in the soil outside a grave, P. 27. (Cat. No. 1900. 3. 1.113).
- Fig. 5. Vessel-stand of clay. ( $\frac{1}{3}$ ). l in Cache, Mercedes. P. 33. Cat. No. 1900. 3. 1.32).
- Fig. 6. Clay disc. (1-2). p in Cache, (Cat. No. 1900. 3. — 1.35).
- Fig. 7. Clay vessel. ( $\frac{1}{2}$ ).  $\alpha$  in Cache, P. 32. (Cat. No. 1900. 3. 1.35).
- Fig. 8. Clay vessel.  $(\frac{1}{2})$ . k in Cache, (Cat. No. 1900. 3. 1.31).



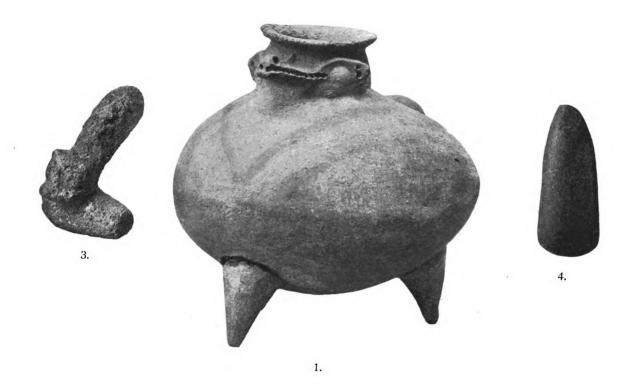
# PLATE 8.

Fig. 1. — Clay vessel. — (1/2). f in Cache, Mo (Cat. No. 1900. 3 — 1.26).	ercedes.	P. 32
Fig. 2. — Clay vessel. — $(\frac{1}{2})$ . $e$ in Cache, (Cat. No. 1900. 3. — 1.25).	,	P. 32
Fig. 3. — Clay vessel. — $\binom{1}{2}$ . $c$ in Cache, (Cat. No. 1900. 3. — 1.23).	,	P. 32
Fig. 4. — Clay vessel. — $\binom{1}{2}$ . $d$ in Cache, (Cat. No. 1900. 3. — 1.24).	3	P. 32
Fig. 5. — Foot of clay vessel. — $(1/2)$ . $m$ in Cache, (Cat. No. 1900. 3. — 1.34).	<b>3</b>	P. 33



## PLATE 9.

- Fig. 1. Clay vessel. ( $\frac{1}{2}$ ). f in Cache, Mercedes. P. 32. (Cat. No. 1900. 3. 1.26).
- Fig. 2. Clay vessel. ( $\frac{1}{2}$ ). g in Cache, P. 33. (Cat. No. 1900. 3. 1.27).
- Fig. 3. Fragment of a vessel-stand of stone.  $(\frac{1}{2})$ . Found in the burial ground at Williamsburg. P. 40. (Cat. No. 1900. 3. 1.36).
- Fig. 4. Stone celt. ( $\frac{1}{2}$ ). Found in a grave at Siquirres. P. 42. (Cat. No. 1900. 3. 3.4).
- Fig. 5. Clay vessel. ( $\frac{1}{2}$ ). Found in a grave at Guasimo. P. 42. (Cat. No. 1900. 3 4.1).
- Fig. 6. Clay vessel. ( $\frac{1}{2}$ ). Found in a grave at Guasimo. P. 42. (Cat. No. 1900. 3. 4.2).





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Stone-cutters' working place. Mercedes.

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STONE-CUTTERS WORKING PLACE.

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## PLATE 11.

- Fig. 1. Human head of stone, cut off from the trunk. (1/3). Cfr.Plate 10. Stone-cutters' working place, Mercedes. P. 36. (Cat. No. 1900. 3. 1.130, a.).
- Fig. 2. Stone figure. ( $\frac{1}{5}$ ). Stone-cutters' working place, Mercedes. P. 35. (Cat. No. 1900. 3. 1.117).
- Fig. 3. Stone figure. (1/3). Stone-cutters' working place, (Cat. No. 1900. 3. 1.118).



# PLATE 12.

- Fig. 1. Human head of stone. ( $\frac{1}{3}$ ). Stone-cutters' working place, Mercedes. P. 36. (Cat. No. 1900. 3. 1.121).
- Fig. 2. Stone figure. ( $^{1}/_{5}$ ). Stone-cutters' working place, Mercedes. P. 36. (Cat. No. 1900. 3. 1.130  $\delta$ ).
- Fig. 3. Stone figure.  $(^{1}/_{5})$ . Stone-cutters' working place, (Cat. No. 1900. 3. 1.119).

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#### PLATE 13.

- Fig. 1. Trunk of a human body of stone (1/2). Stone-cutters' working place.

  Mercedes. P. 36.

  (Cat. No. 1900. 3. 1.125).
- Fig. 2. Arm of stone, embracing small human head. (1/3). Stone-cutters' working place, Mercedes. P. 36.

  (Cat. No. 1900. 3. 1.129).
- Fig. 3. Human head of stone.  $(\frac{1}{2})$ . Stone-cutters' working place, Mercedes. P. 36. (Cat. No. 1900. 3. 1.120).
- Fig. 4. Human leg of stone.  $(\frac{1}{3})$ . Stone-cutters' working place, P. 37. (Cat. No. 1900. 3. 1.122).
- Fig. 5. Human leg of stone.  $(\frac{1}{2})$ . Stone-cutters' working place, P. 37. (Cat. No. 1900. 3. 1.123).
- Fig. 6. Broken part of an object of unknown shape. (1/2). Stone-cutters' working place, Mercedes. P. 37.

  (Cat. No. 1900. 3. 1.128).



## PLATE 14.

- Fig. 1. Seats of stone. (1/6). Found in the forest in the neighborhood of the large mound, Mercedes. P. 37.

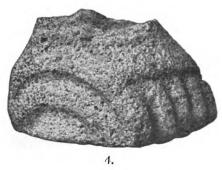
  (Cat. No. 1900. 3. 1.116).
- Fig. 2. Seats of stone. (1/6). Found in the neighborhood of the large mound, Mercedes. Reproduction from a photograph. P. 37.
- Fig. 3. Animal head of stone probably representing a puma. (1/2). Stone-cutters' working place. Mercedes. P. 37.

  (Cat. No. 1900. 3. 1.127).
- Fig. 4. Human foot of stone.  $(\frac{1}{2})$ . Stone-cutters' working place, Mercedes. P. 37. (Cat. No. 1900. 3. 1.124).
- Fig. 5. Human foot of stone.  $\binom{1}{2}$ . Stone-cutters' working place, (Cat. No. 1900. 3. 1.126).

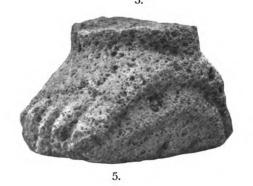






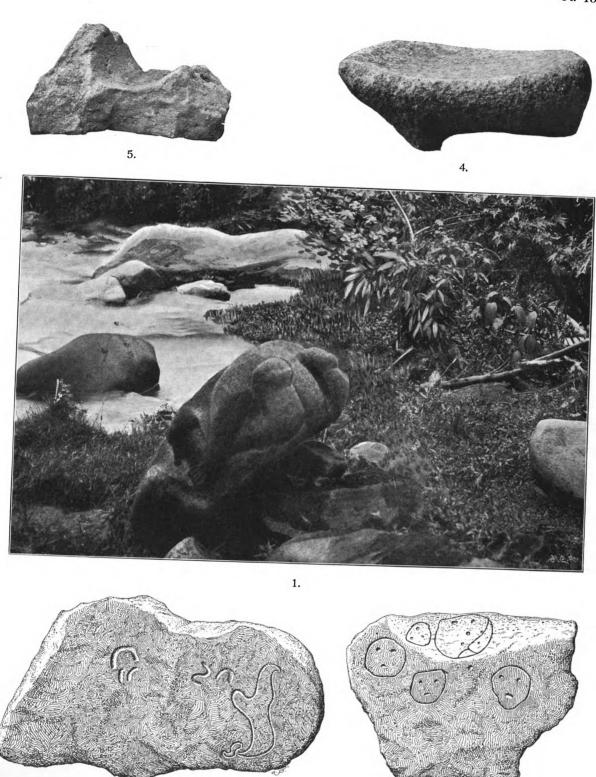






## PLATE 15.

- Fig. 1. Photo of stone figure, at Williamsburg. P. 41.
- Fig. 2. Pictographs on boulder in the river at Williamsburg. P. 41.
- Fig. 3. Pictographs on boulder in the river at Williamsburg. P. 41.
- Fig. 4. -- Metate of stone (1/2). Found in the burial ground at Williamsburg.
  P. 40.
  (Cat. No. 1900. 3. 2.38).
- Fig. 5. Fragment of plaster (1/1) from the pallisade wall of a house, Mercedes. P. 39. (Cat. No. 1900. 3. 1.98).



2.

3.

## PLATE 16.

# FINDS IN THE BURIAL MOUND AT SANTIAGO.

- Fig. 1. Clay vessel.  $\binom{1}{2}$ .  $\alpha$  in Grave 4. P. 55. (Cat. No. 1900. 3. 6.3).
- Fig. 2. Clay vessel. (1/2). d in Grave 5. P. 55. (Cat. No. 1900. 3. 6.7).
- Fig. 3. Clay vessel. (1/2).  $\alpha$  in Grave 6. P. 56. (Cat. No. 1900. 3. 6.10).
- Fig. 4. Clay vessel. (1/2). a in Grave 10. P. 57. (Cat. No. 1900. 3. 6.17).
- Fig. 5. Clay vessel. (1/1).  $\delta$  in Grave 10. P. 57. (Cat. No. 1900. 3. 6.18).
- Fig. 6. Clay vessel. (1/2). a in Grave 23. P. 59. (Cat. No. 1900. 3. 6.29).
- Fig. 7. Clay vessel. (1/2). a in Grave 22. P. 59. (Cat. No. 1900. 3. 6.25).
- Fig. 8. Clay vessel.  $(^{1}/_{2})$ . b in Grave 8. P. 56. (Cat. No. 1900. 3. 6.12).
- Fig. 9. Clay spoon. (1/2).  $\alpha$  in Grave 9. P. 56. (Cat. No. 1900. 3. 6.13).
- Fig. 10. Clay spoon.  $\binom{1}{2}$ . a in Grave 21. P. 59. (Cat. No. 1900. 3. 6.23).
- Fig. 11. Clay spoon.  $\binom{1}{2}$ . Found in the soil above the graves.  $\delta$  on P. 63. (Cat. No. 1900. 3. 6.33).
- Fig. 12. Stone vessel. (1/3). Found in the soil in the centre of the mound.  $\alpha$  on P. 62. (Cat. No. 1900. 3. 6.39).



## PLATE 17.

## FIND IN THE BURIAL MOUND AT SANTIAGO.

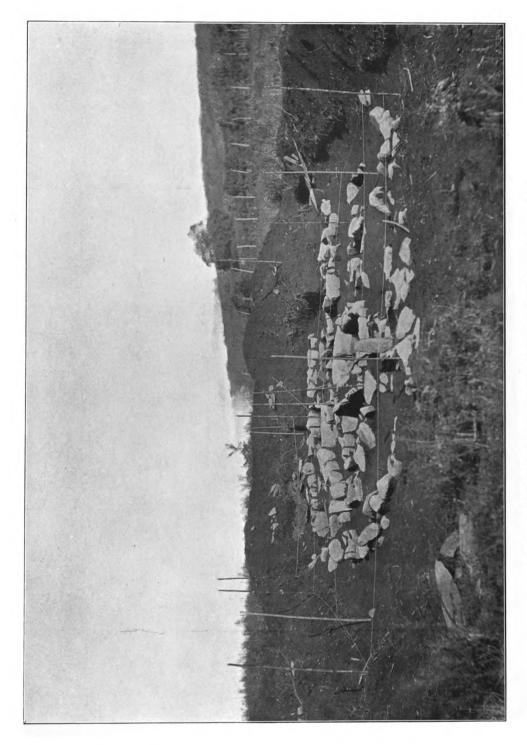
Fig. 1. — Clay vessel. — (1/2).  $\alpha$  in Grave 16. P. 58. (Cat. No. 1900. 3. — 6.3).



## PLATE 18.

Part of Burial Ground at Chircot, showing Excavations.

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PART OF BURIAL-GROUND AT CHIRICOT, SHOWING EXCAVATIONS.

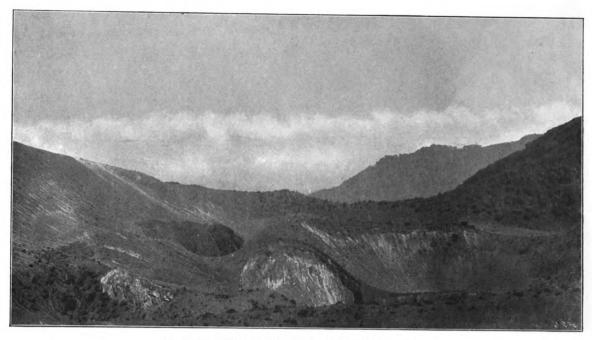
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## PLATE 19.

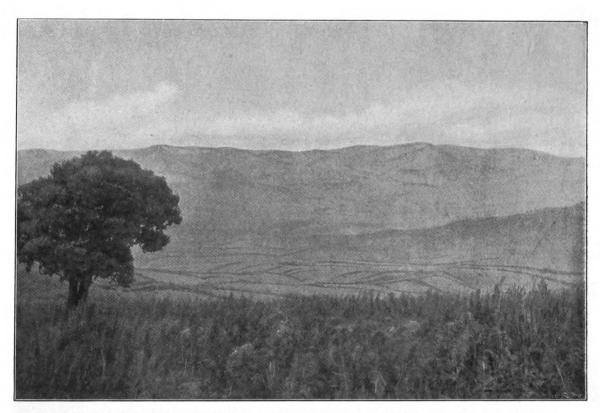
Fig. 1. — The Crater of Mt. Irazu.

Fig. 2. — View of the Valley of Cartago as seen from the Burial Ground at Chircot.

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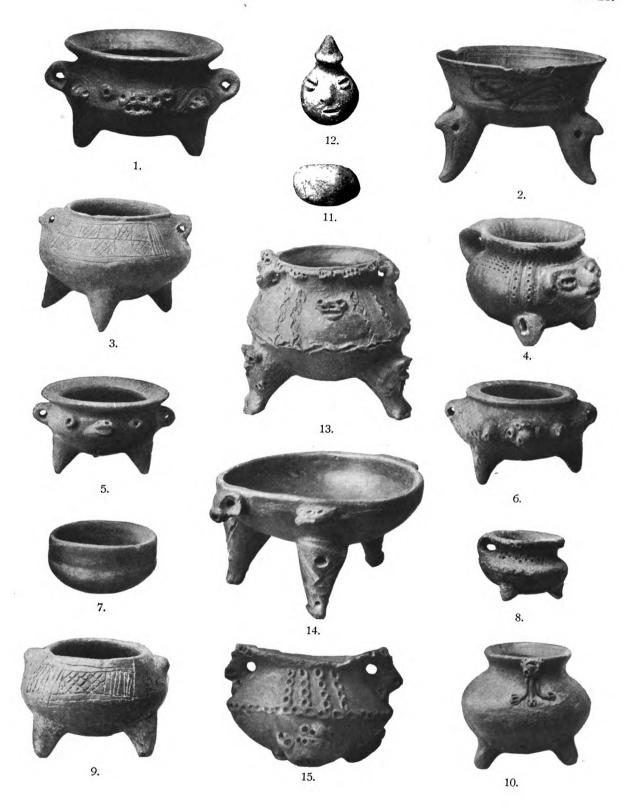
THE CRATER OF THE VOLCANO, MT. IRAZU.



VIEW OF THE VALLEY OF CARTAGO AS SEEN FROM THE BURIAL GROUND AT CHIRCOT.

#### PLATE 20.

- Fig. 1. Clay vessel. (1/2). a in Grave 15. P. 74. (Cat. No. 1900. 3. 7.10).
- Fig. 2. Clay vessel.  $\binom{1}{3}$ . Near Grave 15. P. 74. (Cat. No. 1900. 3. 7.12).
- Fig. 3. Clay vessel.  $\binom{1}{2}$ . b in Grave 15. P. 74. (Cat. No. 1900. 3. 7.11).
- Fig. 4. Clay vessel. (1/2). a in Grave 3. P. 69. (Cat. No. 1900. 3. 7.1).
- Fig. 5. Clay vessel. (1/2). a in Grave 11. P. 72. (Cat. No. 1900. 3. 7.7).
- Fig. 6. Clay vessel. (1/2). a in Grave 17. P. 74. (Cat. No. 1900. 3. 7.13).
- Fig. 7. Clay vessel.  $(^{1}/_{2})$ . a in Grave 5. P. 70. (Cat. No. 1900. 3. 7.2).
- Fig. 8. Clay vessel. (1/2). c in Grave 27. P. 78. (Cat. No. 1900. 3. 7.24).
- Fig. 9. Clay vessel. (1/2).  $\alpha$  in Grave 32. P. 79. (Cat. No. 1900. 3. 7.31).
- Fig. 10. Clay vessel.  $\binom{1}{2}$ . c in Grave 5. P. 70. (Cat. No. 1900. 3. 7.3).
- Fig. 11. Polishing-stone.  $(^{1}/_{2})$ . b in Grave 5. P. 70. (Cat. No. 1900. 3. 7.4).
- Fig. 12. Mask of clay.  $(\frac{1}{1})$ . e in Grave 27. P. 78. (Cat. No. 1900. 3. 7.10).
- Fig. 13. Clay vessel. (1/2). b in Grave 27. P. 78. (Cat. No. 1900. 3. 7.23).
- Fig. 14. Clay vessel. (1/2). a in Grave 27. P. 78. (Cat. No. 1900. 3. 7.22).
- Fig. 15. Clay vessel.  $\binom{1}{2}$ . d in Grave 27. P. 78. (Cat. No. 1900. 3. 7.25).



## PLATE 21.

- Fig. 1. Clay vessel. (1/2). a in Grave 40. P. 81. (Cat. No. 1900. 3. 7.33).
- Fig. 2. Clay vessel. (1/2).  $\delta$  in Grave 40. P. 81. (Cat. No. 1900. 3. 7.34).
- Fig. 3. Clay vessel. (1/2). b in Grave 43. P. 82. (Cat. No. 1900. 3. 7.39).
- Fig. 4. Clay vessel. ( $\frac{1}{2}$ ). c in Grave 42. P. 82. (Cat. No. 1900. 3. 7.37).
- Fig. 5. Handle of clay spoon. ( $\frac{1}{2}$ ). d in Grave 29. P. 79. (Cat. No 1900. 3. 7.30).
- Fig. 6. Clay vessel. (1/2). b in Grave 44. P. 83. (Cat. No. 1900. 3. 7.41).
- Fig. 7. Stone figure. (1/2). a in Grave 42. P. 82. (Cat. No. 1900. 3. 7.35).
- Fig. 8. Clay vessel. (1/2). a in Grave 44. P. 83. (Cat. No. 1900. 3. 7.40).
- Fig. 9. Stone celt. (1/2). c in Grave 29. P. 79. (Cat. No. 1900. 3. 7.29).
- Fig. 10. Clay vessel. (1/2).  $\delta$  in Grave 42. P. 82. (Cat. No. 1900. 3. 7.35).
- Fig. 11. Clay vessel. (1/2).  $\delta$  in Grave 29. P. 79. (Cat. No. 1900. 3. 7.28).
- Fig. 12. Stone celt.  $(^1/_2)$ .  $\alpha$  in Grave 43. P. 82. (Cat. No. 1900). 3. 7.38.)
- Fig. 13. Clay vessel. (1/2). a in Grave 29. P. 78. (Cat. No. 1900. 3. 7.27).
- Fig. 14. Clay vessel. (1/2). a in Grave 54. P. 85. (Cat. No. 1900. 3. 7.44).



#### PLATE 22.

- Fig. 1. Clay vessel. (1/2).  $\alpha$  in Grave 56. P. 85. (Cat. No. 1900. 3. 7.46).
- Fig. 2. Clay vessel. (1/2). b in Grave 56. P. 86. (Cat. No. 1900. 3. 7.47).
- Fig. 3. -- Stone vessel. (1/2). c in Grave 56. P. 86. (Cat. No. 1900. 3. 7.48).
- Fig. 4. Clay vessel. (1/2). c in Grave 77. P. 92. (Cat. No. 1900. 3. 7.64).
- Fig. 5. Clay vessel.  $(^{1}/_{2})$ . b in Grave 60. P. 87. (Cat. No. 1900. 3. 7.51).
- Fig. 6. Clay vessel. (1/2).  $\alpha$  in Grave 69. P. 89. (Cat. No. 1900. 3. 7.56).
- Fig. 7. Clay vessel. (1/2).  $\alpha$  in Grave 61. P. 87. (Cat. No. 1900. 3. 7.53).
- Fig. 8. Clay vessel. (1/2). a in Grave 60. P. 87. (Cat. No. 1900. 3. 7.50).



### PLATE 23.

FIND IN BURIAL GROUND I, CHIRCOT.

Fig. 1, 2. — Clay vessel. — (1/2). On the roof of Grave 67. (Cat. No. 1900. 3. — 7.54).



#### PLATE 24.

- Fig. 1. Stone celt. (1/2). a in Grave 72. P. 90. (Cat. No. 1900. 3. 7.57).
- Fig. 2. Clay vessel. (1/2). b in Grave 72. P. 90. (Cat. No. 1900. 3. 7.58).
- Fig. 3. Clay vessel. ( $\frac{1}{2}$ ). a in Grave 85. P. 93. (Cat. No. 1900. 3. 7.66).
- Fig. 4. Human head of stone. (1/2). c in Grave 89. P. 94. (Cat. No. 1900. 3. 7.70).
- Fig. 5. Clay vessel.  $(^{1}/_{2})$ . b in Grave 89. P. 94. (Cat. No. 1900. 3. 7.69).
- Fig. 6. Clay vessel. (1/2).  $\delta$  in Grave 75. P. 91. (Cat. No. 1900. 3. 7.61).
- Fig. 7. Stone vessel. (1/2). b in Grave 85. P. 93. (Cat. No. 1900. 3. 7.67).
- Fig. 8. Clay vessel. (1/2). c in Grave 72. P. 91. (Cat. No. 1900. 3. 7.59).
- Fig. 9. Clay vessel. (1/2). a in Grave 89. P. 94. (Cat. No. 1900. 3. 7.68).
- Fig. 10. Clay vessel. (1/2).  $\alpha$  in Grave 75. P. 91. (Cat. No. 1900. 3. 7.60).



## PLATE 25.

- Fig. 1. Clay vessel. (1/2). b in Grave 96. P. 96. (Cat. No. 1900. 3. 7.72).
- Fig. 2. Polishing-stone. (1/2). *a* in Grave 96. P. 96. (Cat. No. 1900. 3. 7.71).
- Fig. 3. Human effigy of stone. ( $^{1}/_{2}$ ).  $\alpha$  in Grave 107. P. 98. (Cat. No. 1900. 3. 7.75).
- Fig. 4. Clay vessel. (1/2). d in Grave 112. P. 99. (Cat. No. 1900. 3. 7.78).
- Fig. 5. Clay vessel. (1/2). c in Grave 112. P. 99. (Cat. No. 1900. 3. 7.81).
- Fig. 6. Clay vessel.  $\binom{1}{2}$ . a in Grave 112. P. 99. (Cat. No. 1900. 3. 7.79).
- Fig. 7. Bone implement. (1/2).  $\delta$  in Grave 117. P. 100. (Cat. No. 1900. 3. 7.84).
- Fig. 8. Clay vessel. (1/2). c in Grave 107. P. 98. (Cat. No. 1900. 3. 7.59).
- Fig. 9. Stone celt. (1/2). e in Grave 112. P. 99. (Cat. No. 1900. 3. 7.83).
- Fig. 10. Clay vessel.  $\binom{1}{2}$ .  $\delta$  in Grave 112. P. 99. (Cat. No. 1900. 3. 7.80).



## PLATE 26.

- Fig. 1. Clay vessel. ( $^{1}/_{2}$ ). Close to Grave 121. P. 102. (Cat. No. 1900. 3. 7.90).
- Fig. 2, 3. Clay vessel.  $(\frac{1}{2})$ . a in Grave 125. P. 103. (Cat. No. 1900. 3. 7.91).
- Fig. 4. Clay vessel. (1/2). a in Grave 119. P. 101. (Cat. No. 1900. 3. 7.85).
- Fig. 5. Clay vessel. ( $\frac{1}{2}$ ).  $\delta$  in Grave 119. P. 101. (Cat. No. 1900. 3. 7.86).



## PLATE 27.

- Fig. 1. Clay vessel. (1/2). Close to Grave 130. P. 104. (Cat. No. 1900. 3. 7.96).
- Fig. 2. Clay vessel. (1/2).  $\alpha$  in Grave 141. P. 108. (Cat. No. 1900. 3. 7.103).
- Fig. 3. Clay vessel. (1/2). c in Grave 119. P. 101. (Cat. No. 1900. 3. 7.87).
- Fig. 4. Clay vessel. (1/2).  $\delta$  in Grave 129. P. 104. (Cat. No. 1900. 3. 7.94).
- Fig. 5. Stone celt.  $\binom{1}{2}$ .  $\delta$  in Grave 125. P. 103. (Cat. No. 1900. 3. 7.92).
- Fig. 6. Clay vessel. (1/2). c in Grave 129. P. 104. (Cat. No. 1900. 3. 7.95).
- Fig. 7. Stone celt.  $\binom{1}{2}$ . d in Grave 138. P. 106. (Cat. No. 1900. 3. 7.101).
- Fig. 8. Stone celt.  $\binom{1}{1}$ .  $\delta$  in Grave 141. P. 108. (Cat. No. 1900. 3. 7.104).
- Fig. 9. Clay vessel. (1/2). a in Grave 129. P. 104. (Cat. No. 1900. 3. 7.93).



## PLATE 28.

- Fig. 1, 2. Clay vessel.  $\binom{1}{2}$ .  $\alpha$ . in Grave 142. P. 108. (Cat. No. 1900. 3. 7.105).
- Fig. 3. Clay vessel. (1/2). a in Grave 154. P. 111. (Cat. No. 1900. 3. 7.113).
- Fig. 4. Clay vessel. (1/2).  $\delta$  in Grave 154. P. 111. (Cat. No. 1900. 3. 7.114).
- Fig. 5. Stone celt.  $(^{1}/_{2})$ . a in Grave 149. P. 110. (Cat. No. 1900. 3. 7.109).
- Fig. 6. Stone celt. (1/2). a in Grave 166. P. 114. (Cat. No. 1900. 3. 7.119).
- Fig. 7. Clay vessel.  $\binom{1}{2}$ .  $\alpha$  in Grave 143. P. 109. (Cat. No. 1900. 3. 7.107).
- Fig. 8. Clay vessel.  $\binom{1}{2}$ . a in Grave 159. P. 113. (Cat. No. 1900. 3. 7.116).
- Fig. 9. Clay vessel. (1/2).  $\delta$  in Grave 143. P. 109. (Cat. No. 1900. 3. 7.108).



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## PLATE 29.

FIND IN BURIAL GROUND I, CHIRCOT.

Fig. 1, 2. — Clay vessel. — (1/2). Close to Grave 163. P. 114. (Cat. No. 1900. 3. — 7.118).



#### PLATE 30.

- Fig. 1, 2. Clay vessel.  $\binom{1}{2}$ . Close to Grave 173. P. 116. (Cat. No. 1900. 3. 7.127).
- Fig. 3. Clay vessel. ( $^{1}/_{2}$ ). Close to Grave 179 A. P. 118. Cat. No. 1900. 3. 7.130).
- Fig. 4. Clay vessel.  $\binom{1}{2}$ . a in Grave 174. P. 117. (Cat. No. 1900. 3. 7.128).
- Fig. 5. Clay vessel.  $\binom{1}{2}$ . a in Gvave 150. P. 110. (Cat. No. 1900. 3. 7.110).
- Fig. 6. Clay vessel. (1/2). c in Grave 171. P. 116. (Cat. No. 1900. 3. 7.126).
- Fig. 7. Clay vessel.  $\binom{1}{2}$ . a in Grave 171. P. 116. (Cat. No. 1900. 3. 7.124).



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## PLATE 31.

Fig. 1, 2. — Clay vessel, found close to Grave 192. — ( $^1/_2$ ). P. 121. (Cat. No. 1900. 3. — 7.134).



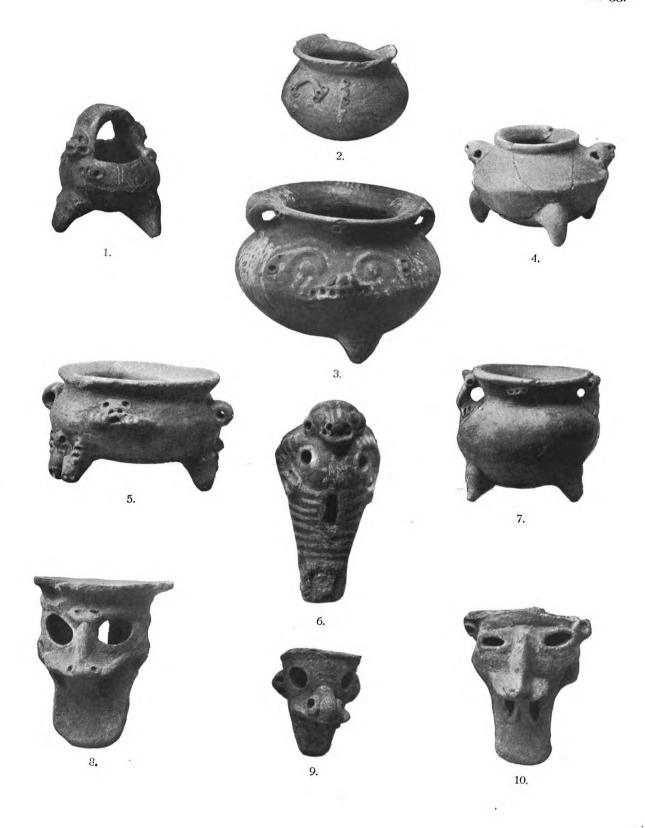
## PLATE 32.

Fig. 1, 2. — Clay vessel. — (1/2).  $\alpha$  in Grave 195 A. P. 122. (Cat. No. 1900. 3. — 7.136).



## PLATE 33.

- Fig. 1. Clay vessel.  $\binom{1}{2}$ .  $\alpha$  in Grave 203 C. P. 123. (Cat. No. 1900. 3. 7.138).
- Fig. 2. Clay vessel. (1/2). a in Grave 192. P. 121. (Cat. No. 1900. 3. 7.135).
- Fig. 3. Clay vessel. (1/2). a in Grave 182. P. 118. (Cat. No. 1900. 3. 7.131).
- Fig. 4. Clay vessel. (1/2). a in Grave 185. P. 119. (Cat. No. 1900. 3. 7.132).
- Fig. 5. Clay vessel. (1/2). a in Grave 191. P. 120. (Cat. No. 1900. 3. 7.133).
- Fig. 6. Leg of clay vessel.  $\binom{1}{2}$ . Sporadic find, outside grave. P. 126. (Cat. No. 1900. 3. 7.162).
- Fig. 7. Clay vessel. (1/2). a in Grave 198. P. 122. (Cat. No. 1900. 3. 7.137).
- Fig. 8. Leg of clay vessel. (1/2). Sporadic find, outside grave. P. 126. (Cat. No. 1900. 3. 7.163).
- Fig. 9. Leg of clay vessel. (1/2). Sporadic find, outside grave. P. 126. (Cat. No. 1900. 3. 7.167).
- Fig. 10. Leg of clay vessel. (1/2). Sporadic find, outside grave. P. 126. (Cat. No. 1900. 3. 7.171).



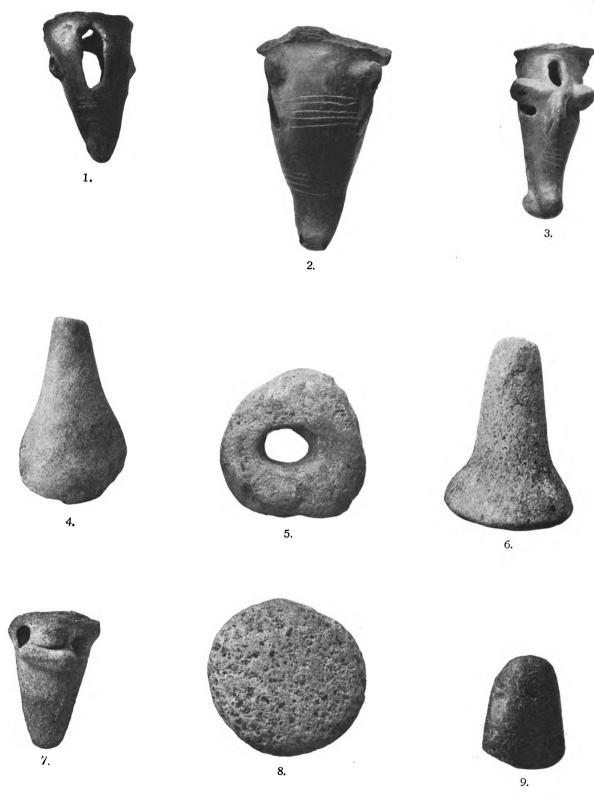
### PLATE 34.

# SPORADIC FINDS IN FIELD I, CHIRCOT. (See p. 126).

- Fig. 1. Leg of clay vessel. Shape, animal's head. Colour, red. Height 8.2 cm. (Cat. No. 1900. 3. 7.243).
- Fig. 2. Leg of clay vessel. Shape, animal's head. Colour, red. Height 12.8 cm. (Cat. No. 1900. 3. 7.186).
- Fig. 3. Leg of clay vessel. Shape, animal's head. Colour, red. Height 11 cm. (Cat. No. 1900. 3. 7.195).
- Fig. 4. Greenstone implement, tongue-shaped. Length 12.1 cm. (Cat. No. 1900. 3. 7.159).
- Fig. 5. Stone, nearly round and flat, with a round hole in the middle. Use unknown. The only one of this shape I found in the highlands. Diam. at the widest part 9.3 cm.

  (Cat. No. 1900. 3. 7.157).
- Fig. 6. Pestle of greenstone; the only one I found in the highlands. Height 12 cm. (Cat. No. 1900. 3. 7.158).
- Fig. 7. Leg of clay vessel. Shape, rudimentary head. Colour, red. Height 8.1 cm.

  (Cat. No. 1900. 3. 7.169).
- Fig. 8. Rubbing-stone, circular, flat. Diam. 10 cm. (Cat. No. 1900. 3. 7.143).
- Fig. 9. Celt of aphanite. Length 7.4 cm. (Cat. No. 1900. 3. 7.153).



### PLATE 35.

# FINDS IN BURIAL GROUND II, CHIRCOT. (See p. 127).

Figs. 1, 2. — Bowl, hemispherical, large, of reddish colour with black and red ornaments. Inside, the wall is ornamented with a broad, bipartite zone, each partition containing a realistic figure of a monkey with a long tail and a highly conventionalized human(?) figure, evidently belonging to the same type as represented in the tripartite, peripheral zone inside the bowl figured on Pl. 36, but still more conventionalized. One of the monkeys has on the back a sickle-shaped appendage, somewhat resembling the spiral on the neck of monkey images (Fig.



Fig. 487

487) on ancient Mexican pottery reproduced by Hermann Strebel. The exterior decoration consists of simple, black bands. Height 10.8 cm. Diam. 28.2 cm.

(Cat. No. 1900. 3. -7.427).

<sup>&</sup>lt;sup>1</sup> STREBEL, HERMANN. Ueber Tierornamente auf Thongefässen aus Alt-Mexico, Pl. 1. Compare also: SELER, EDW. Der Charakter der aztekischen u. der Maya-Handschriften. Z. f. E. 1887. Sitz. Ber. p. [485].



#### PLATE 36.

# FIND FROM FIELD II, CHIRCOT. (See p. 127).

Fig. 1, 2. — Large, hemispherical, tripod bowl. The interior is richly embellished with red, yellow and black designs on cream-coloured ground. The circular bottom piece shows two highly conventionalized, grotesque human heads and arms in gyration round the small central circle. Compare Pl. 71, Fig. 1. The inside, peripheral zone is tripartite, each partition containing a conventionalized head with arms. The exterior decoration is a simple geometrical one, made up of broad red bands. Legs in the shape of animals' heads. Diam. 22.5 cm. Height 11.3 cm.

(Cat. No. 1900. 3. — 7.299).



#### PLATE 37.

### FINDS FROM FIELD II, CHIRCOT.

(See p. 127).

Fig. 1. — Vessel, globular, with a small bird in relief on each shoulder and a row of degenerate animals' heads encircling the neck. On each side there is a field with incised, geometrical designs. Colour, brown. Height 8.4 cm. Diam. 8.5 cm.

(Cat. No. 1900. 3. — 7.418).

Fig. 2. — Vessel, nearly globular, tripod, with two ears, and on each side of the shoulder an incised quadrilateral panel. Colour, red. Height 8 cm. Diam. 8.4 cm.

(Cat. No. 1900. 3. — 7.414).

- Fig. 3. Vessel in the shape of a jaguar with a hemispherical bowl on its back. The vessel is cream-coloured, and is all richly decorated with spots in black and orange, imitating those on the skin of the animal. The jaguar is hollow and contains rattling balls. Height 12.9 cm. Length 14.8 cm. (Cat. No. 1900. 3. 7.333).
- Fig. 4. Three-legged, shallow, almost rectangular bowl in the shape of a jaguar. Ground colour, cream-white, decorated with spots in black and red in imitation of the animal's skin. Height 9.8 cm. Length 17.3 cm. (Cat. No. 1900. 3. 7.451).
- Fig. 5. Nearly globular vessel with narrow mouth; on each side is a face in low relief. Colour, red. Height 12.2 cm. Diam. 12.8 cm. (Cat. No. 1900. 3. 7.290).
- Fig. 6. Almost globular, wide-mouthed vessel with a sharp ridge running round the lower half of the body. Decorated with double rows of circular pellets and animal designs in relief. Colour, red. Height 11 cm. Diam. 11.9 cm.

(Cat. No. 1900. 3. — 7.385).

Fig. 7. — Celt, spool-shaped, of greenstone. Length 8.4 cm. (Cat. No. 1900. 3. - 7.488).



#### PLATE 38.

### FINDS FROM FIELD II, CHIRCOT. (See p. 127).

Fig. 1. -- Large, shallow, tripod bowl, ornamented both inside and outside the rim with bands on which there are finely executed, incised, geometrical designs. Colour, brownish red. Legs in the shape of animals' heads with prolonged, flat chins, which are painted white. Height 12.8 cm. Diam. 22 cm.

(Cat. No. 1900. 3. -- 7.297).

Fig. 2. — Bowl, fairly large, shallow, with low walls, slightly curved outwards. The exterior is decorated with incised, geometrical designs. On each side at the base a small animal's head projects. Legs in the shape of highly conventionalized animals' heads. Colour, black. Height 10.6 cm. Diam. 16.9 cm.

(Cat. No. 1900. 3. — 7.302).

Fig. 3. — Bowl, large, shallow, tripod, adorned on one side with an animal's head and fore-feet in relief, flanked by painted, rectangular fields with geometrical designs in yellow. On the opposite side there are two similar fields, but with designs of a different pattern (Fig. 488), appar-



ently showing a pair of conventionalized animals' heads twice repeated. Colour, red. Height 13.4 cm. Diam. 22.1 cm.

(Cat. No. 1900. 3. — 7.424).



#### PLATE 39.

### FINDS IN FIELD II, CHIRCOT. (See p. 127).

Fig. 1. — Depressed globular, tripod vessel with high upright rim. The vessel is adorned with two small, rather realistic, human figures modelled in the round and serving as ears. On each side of the shoulder is a rudimentary animal's face and fore-feet in relief; round the vessel an imperfect fret is incised. The rim is also adorned with similar rudimentary heads. Colour, red but blackened by soot. Height 9 cm. Diam. 10.9 cm.

(Cat. No. 1900. 3. — 7.405).

Fig. 2. — Depressed globular, tripod vessel; on each side an owl-like face in relief — the beak forming an ear for the vessel; below this face there is an animal's head with fore-feet in relief. The two faces are separated by an incised, arcuate band, formed by four parallel lines and three rows of punctate markings. Colour, red but blackened by soot. Height 8.8 cm. Diam. 10.7 cm.

(Cat. No. 1900. 3. — 7.268).

- Fig. 3. Leg of a vessel. Shape, human head. Colour, red. Height 8 cm. (Cat. No. 1900. 3. 7.341).
- Fig. 4. Tripod vessel with round bottom and sharp equatorial ridge; the upper half is decorated with incised geometrical ornaments. The legs have on each side three small round holes instead of the usual longitudinal slits. Colour, red. Height 13.8 cm. Diam. 13.5 cm. (Cat. No. 1900. 3. 7.265).
- Fig. 5. Tripod vessel, almost globular. On each side a degenerate animal figure in relief, flanked by a pair of raised and incised vertical fillets.

Round the widest part of the body runs a raised, cord-like ridge. The rim has two heads serving as ears and smaller rudimentary heads all round. Legs in the shape of an animal figure. Colour, red but blackened by soot. Height 12.4 cm. Breadth 13 cm.

(Cat. No. 1900. 3. — 7.277).

Fig. 6. — Shallow four-legged bowl, imitative of a quadruped (probably a jaguar) with a short tail. The body is almost oval and hemispherical, the rim is broad, flat and bent downwards. Colour, whitish with ornaments in black, red and yellow. The rim is adorned with the same fretwork design observed on the vessel in Fig. 50, p. 63. Height 6.5 cm. Length 14.5 cm.

(Cat. No. 1900. 3. — 7.355).

Fig. 7. — Shallow, oblong bowl in the shape of an animal with three legs and a short tail. On each side a projecting flat lobe. Colour, red. Height 9 cm. Length 13.5 cm.

(Cat. No. 1900. 3. — 7.428).



#### PLATE 40.

### FINDS IN FIELD II, CHIRCOT. (See p. 127).

- Fig. 1. Tripod cup with erect walls adorned with geometrical designs painted yellow on a red ground. Legs in the shape of conventionalized animals' heads. Height 8.8 cm. Diam. 10.3 cm. (Cat. No. 1900. 3. — 7.312).
- Fig. 2. Very shallow, tripod bowl. Between two of the legs there projects from the base of the vessel a human head supported by arms extending from the legs. Legs in the shape of animals' heads. Colour, red. Height 10 cm. Diam. 15.2 cm.

  (Cat. No. 1900. 3. 7.304).
- Fig. 3. A fragment of a clay vessel, in the shape of an animal's head. Colour, pale red. Height 6 cm. (Cat. No. 1900. 3. —7.334).
- Fig. 4. Bowl, nearly hemispherical, broken off from some apparently large base. On each side there is a large, clumsy animal's head. Colour, whitish cream, with ornaments in black. Length 9.8 cm. Height 5.6 cm.

(Cat. No. 1900. 3. - 7.334).

- Fig. 5. Shallow, plain bowl with flattened bottom. Colour, red. Height 4.1 cm. Diam. 11 cm. (Cat. No. 1900. 3. 7.330).
- Fig. 6. Piece of the wall of a clay vessel, showing a broad face in low relief Colour, red. Height 8.5 cm.

  (Cat. No. 1900. 3. 7.370).



5.

6.

#### PLATE 41.

# FINDS IN FIELD II, CHIRCOT. (See p. 127).

- Fig. 1. Bowl, shallow, with rounded bottom; walls slightly bent inward and adorned on the red ground with a design in black, five times repeated round the vessel. Height 8.4 cm. Diam. 15.8 cm. (Cat. No. 1900. 3. 7.325).
- Fig. 2. Flattened globular, tripod bowl, with a broad face and fore-legs of some animal in relief on each side. Colour, red but blackened by soot. Height 10.1 cm. Diam. 14.4 cm. (Cat. No. 1900. 3. 7.399).
- Fig. 3. Small vessel in the shape of a three-legged animal. Colour, red. Height 6.1 cm. Diam. of body 4.5 cm. (Cat. No. 1900. 3. 7.335).
- Fig. 4. Hemispherical and quite large bowl on tall annular base. At the rim on each side there is an animal's head and four knobs (feet?). Colour red. Height 11.1 cm. Diam. 18.7 cm.

  (Cat. No. 1900. 3. 7.321).
- Fig. 5. Vessel, three-legged, in the shape of a bird. Colour, yellowish and adorned with red streaks. Height 11.6 cm. Breadth of body 8.1 cm. (Cat. No. 1900. 3. 7.455).
- Fig. 6. Globular, tripod vessel with cylindrical neck, shoulder adorned with a quadrangular design in red, four times repeated. Ground colour, white. Height 12.3 cm. Diam. 11.9 cm. (Cat. No. 1900. 3. 7.421).
- Fig. 7. Leg of clay vessel. Colour, red. Height 8.6 cm. (Cat. No 1900. 3. 7.483).

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#### PLATE 42.

### FINDS IN FIELD II, CHIRCOT. (See p. 127).

- Fig. 1. Human figure of basalt lava. Sex not marked. Height 9.7 cm. (Cat. No. 1900. 3. — 7.253).
- Fig. 2. -- Human figure of basalt lava. Sex not marked. Height 13.5 cm. (Cat. No. 1900. 3. — 7.252).
- Fig. 3. Leg of a clay-vessel. Shape that of a human figure. Height 10.8 cm. (Cat. No. 1900. 3. — 7.337).
- Fig. 4. Graceful, symmetrical bowl of fine-grained, grayish basalt lava, supported on an annular base, composed of seven bird-like figures with heads upwards. Height 10.8 cm. Diam. 14.4 cm. (Cat. No. 1900. 3. — 7.249).
- Fig. 5. Human figure of stone, holding with both hands its plait of hair. Broken off at the waist. Material, dark basalt lava. Height 11.5 cm. (Cat. No. 1900. 3. — 7.251).
- Fig. 6. Human figure of stone, the flute-playing god, rather crudely executed. Height 11 cm.

(Cat. No. 1900. 3. — 7.486).

Fig. 7. - Chipped, triangular celt of chalcedony with convex faces and sharp sides. Length 15.5 cm. (Cat. No. 1900. 3. — 7.255).



## PLATE 43.

# FINDS IN GRAVES OF MOUND I, LOS LIMONES.

- Fig. 1. Clay vessel. (1/3). a in Grave 6. P. 132. (Cat. No. 1900. 3. 8.5).
- Fig. 2. Clay vessel. (1/2).  $\theta$  in Grave 6. P. 132. (Cat. No. 1900. 3. 8.6).
- Fig. 3. Clay vessel. (1/2).  $\alpha$  in Grave 3. P. 131. (Cat. No. 1900. 3. 8.2).
- Fig. 4. Clay vessel. (1/2).  $\delta$  in Grave 23. P. 136. (Cat. No. 1900. 3. 8.20).
- Fig. 5. Clay vessel. (1/3). d in Grave 23. P. 137. (Cat. No. 1900. 3. 8.22).
- Fig. 6. Clay vessel. (1/2). c in Grave 18. P. 135. (Cat. No. 1900. 3. 8.17).
- Fig. 7. Clay vessel. (1/2).  $\alpha$  in Grave 20. P. 135. (Cat. No. 1900. 3. 8.18).
- Fig. 8. Stone celt. (1/2).  $\theta$  in Grave 10. P. 133. (Cat. No. 1900. 3. 8.10).
- Fig. 9. Stone figure, human. (1/2).  $\alpha$  in Grave 18. P. 135. (Cat. No. 1900. 3. 8.15).
- Fig. 10. Clay vessel. (1/2).  $\alpha$  in Grave 11. P. 133. (Cat. No. 1900. 3. 8.11).



### PLATE 44.

## FINDS IN GRAVES OF MOUND II, LOS LIMONES. (Exceptions Figs. 5 and 8).

- Fig. 1. Clay vessel. (1/3).  $\alpha$  in Grave 45. P. 143. (Cat. No. 1900. 3. 8.61).
- Fig. 2. Clay vessel. (1/2). b in Grave 44. P. 143. (Cat. No. 1900. 3. 8.62).
- Fig. 3. Clay spoon. (1/2). d in Grave 43. P. 143. (Cat. No. 1900. 3. 8.60).
- Fig. 4. Clay vessel. (1/2). a in Gvave 48. P. 144. (Cat. No. 1900. 3. 8.65).
- Fig. 5. Clay vessel. (1/3). a in Grave 24 of Mound I. P. 137. (Cat. No. 1900. 3. 8.49).
- Fig. 6. Clay vessel.  $({}^{1}/_{3})$ .  $\alpha$  in Grave 61. P. 147. (Cat. No. 1900. 3. 8.71).
- Fig. 7. Vessel-stand. (1/2). b in Grave 56. P. 146. (Cat. No. 1900. 3. 8.69).
- Fig. 8. Clay vessel.  $(^{1}/_{2})$ . Found in Mound III, Los Limones. P. 148. (Cat. No. 1900. 3. 8.150).



6.



#### PLATE 45.

## FINDS IN MOUND III, AT LOS LIMONES. (See p. 148).

Fig. 1. — Tall vase of unusual shape; base, annular. The vessel is of a warm red colour and is adorned with three zones of ornaments in white and black. The band at the top shows a succession of conventionalized animals' figures all round. This vessel is the only one obtained by me in Costa Rica which illustrates the method of \*negative painting\*, described by W. H. Holmes in his essay on Chiriquian art and by Dr. Max Uhle in his observations on Costa-Rican and Columbian earthenware. Height 22 cm. Diam. 17.4 cm.

Adhering to the bottom of this vase there is some hard, resin-like substance, which burns with a clear light. It may be copal, but is now odourless.

(Cat. No. 1900. 3. — 8.95).

(Cat. No. 1900. 3. — 8.103).

- Fig. 2. Diminutive, tripod bowl of a red colour. The legs are adorned with human heads. Height 5.6 cm. Diam. 6.5 cm. (Cat. No. 1900. 3. 8.128).
- Fig. 3. Diminutive, tripod vessel of a red colour. The legs are in the shape of human heads. Height 5.7 cm. Diam. 5.2 cm. (Cat. No. 1900. 3. 8.139).
- Fig. 4. Small, cylindrical, tripod vessel with flaring rim. The legs are adorned with lizards. Colour, red. Height 8.7 cm. Diam. 6 cm. (Cat. No. 1900. 3. 8.126).
- Fig. 5. Small, tripod vase with narrow neck and two punctate strings around the body. Legs in the shape of animal figures. Height 7.6 cm. Diam. 4.9 cm.

- Fig. 6. Small, shallow bowl with upright walls; rim notched. Colour, red. Height 7.9 cm. Diam. 15.6 cm. (Cat. No. 1900. 3. 8.154).
- Fig. 7. Leg of clay vessel in the shape of a head. Probably a modification of the flute-playing god. Length 7.6 cm.

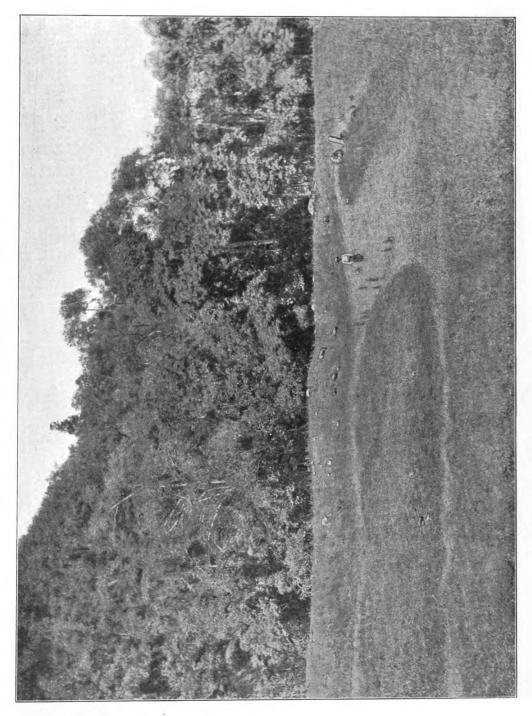
  (Cat. No. 1900. 3. 8.161).
- Fig. 8. Leg of clay vessel, similar to Fig. 7. Length 6.4 cm. (Cat. No. 1900. 3. 8.160).
- Fig. 9. Diminutive three-legged metate of basalt lava. Ceremonial object or plaything. Length 6.5 cm.
   (Cat. No. 1900. 3. 8.174).



## PLATE 46.

View of the Central Part of the Ancient Remains at Orosi.

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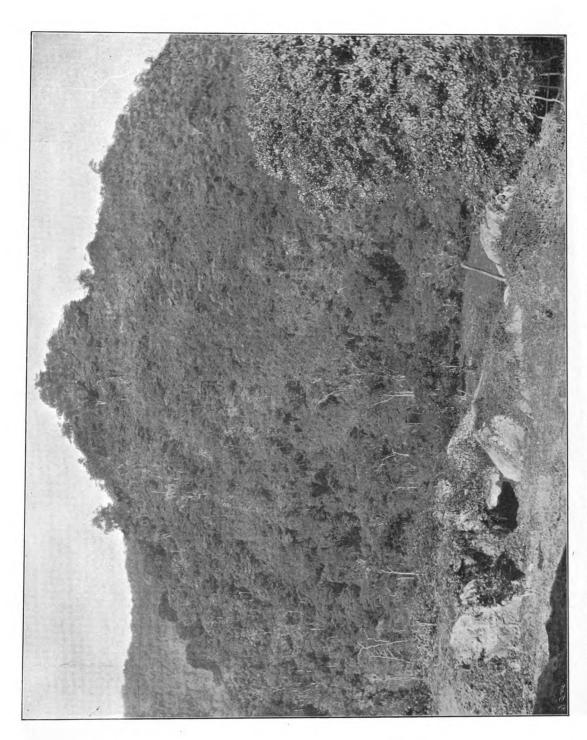
VIEW OF THE CENTRAL PART OF THE ANCIENT REMAINS AT OROSI.

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## PLATE 47.

View of the Upper Part of the Ancient Remains at Orosi, as seen from the Hacienda.

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VIEW OF THE UPPER PART OF THE ANCIENT REMAINS AT OROSI, AS SEEN FROM THE HACIENDA.

## PLATE 48.

View of the Lower Part of the Ancient Remains at Orosi.



VIEW OF THE LOVER PART OF THE ANCIENT REMAINS AT OROSI.

### PLATE 49.

#### FINDS IN GRAVES OF GROUP I, OROSI.

- Fig. 1. Clay vessel.  $(\frac{1}{2})$ . b in Grave 6. P. 154. (Cat. No. 1900. 3. 9.10).
- Fig. 2. -- Stone implement. -- (1/2). a in Grave 4. P. 153. (Cat. No. 1900. 3. -- 9.5).
- Fig. 3. Stone implement.  $\binom{1}{2}$ . c in Grave 13. P. 157. (Cat. No. 1900. 3. 9.25).
- Fig. 4. Vessel-stand.  $\binom{1}{2}$ . d in Grave 13. P. 157. (Cat. No. 1900. 3. 9.26).
- Fig. 5. Stone implement.  $(^{1}/_{2})$ . c in Grave 4. P. 153. (Cat. No. 1900. 3. 9.7).
- Fig. 6. Stone implement. (1/2).  $\delta$  in Grave 4. P. 153. (Cat. No. 1900. 3. 9.6).
- Fig. 7. Bead made out of a shell.  $(\frac{1}{1})$ . On the roof of Grave 4. P. 153. (Cat. No. 1900. 3. 9.4).
- Fig. 8. Clay vessel.  $\binom{1}{2}$ . a in Grave 5. P. 153. (Cat. No. 1900. 3. 9.8).
- Fig. 9. Clay vessel. (1/2). a in Grave 6. P. 154. (Cat. No. 1900. 3. 9.9).
- Fig. 10. Clay vessel. (1/2). a in Grave 8. P. 155. (Cat. No. 1900. 3. 9.9).



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#### PLATE 50.

### FINDS IN GRAVES OF GROUP I, OROSI.

- Fig. 1. Human head of stone. (1/2). c in Grave 14. P. 157. (Cat. No. 1900. 3. 9.30).
- Fig. 2. Stone tablet.  $\binom{1}{3}$ . c on the roof Grave 14. P. 157. (Cat. No. 1900. 3. 9.27).
- Fig. 3. Clay vessel.  $\binom{1}{2}$ . a in Grave 14. P. 157. (Cat. No. 1900. 3. 9.28).
- Fig. 4. Clay vessel.  $(^{1}/_{3})$ . a in Grave 11. P. 156. (Cat. No. 1900. 3. 9.17).
- Fig. 5. Stone chip.  $(\frac{1}{2})$ . *e* in Grave 11. P. 156. (Cat. No. 1900. 3. 9.21).
- Fig. 6. Stone implement.  $\binom{1}{2}$ . f in Grave 11. P. 156. (Cat. No. 1900. 3. 9.27).
- Fig. 7. Stone implement.  $(\frac{1}{2})$ . d in Grave 11. P. 156. (Cat. No. 1900. 3. 9.20).
- Fig. 8. Clay vessel.  $(\frac{1}{3})$ . b in Grave 11. P. 156. (Cat. No. 1900. 3. 9.18).
- Fig. 9. Clay vessel. (1/2). a in Grave 3. P. 152. (Cat. No. 1900. 3. 9.1).



#### PLATE 51.

## SPORADIC FINDS WITHIN GROUP I, OROSI. (See p. 158).

- Fig. 1. Human face, fragment of a clay-vessel. Colour, red with vertical streaks in black, partly obliterated.  $\binom{2}{3}$ . (Cat. No. 1900. 3. 9.57).
- Fig. 2. Human figure of clay, hollow; head broken off. Colour, yellow.  $\binom{1}{2}$ . (Cat. No. 1900. 3. 9.56).
- Fig. 3. Animal's head of clay. Colour, red. (1/1). (Cat. No. 1900. 3. 9.61).
- Fig. 4. Beak of a bird (clay). Colour, red.  $\binom{1}{1}$ . (Cat. No. 1900. 3. 9.70).
- Fig. 5. Piece of the tail of an alligator (clay). Colour, red.  $(\frac{1}{2})$ . (Cat. No. 1900. 3. 9.92).
- Fig. 6. Human hand with two armlets (clay). Colour, red.  $(\frac{2}{3})$ . (Cat. No. 1900. 3. 9.68).
- Fig. 7. Human head with a tall head-dress, hollow (clay). Colour, red.  $(^2/_3)$ . (Cat. No. 1900. 3. 9.67).
- Fig. 8. Leg of large clay vessel. Colour, yellowish.  $(\frac{1}{2})$ . (Cat. No. 1900. 3. 9.52).
- Fig. 9. Implement of greenstone, cross-shaped.  $\binom{1}{2}$ . (Cat. No. 1900. 3. 9.116).



#### PLATE 52.

# SPORADIC FINDS WITHIN GROUP I, OROSI. (See p. 158).

- Fig. 1. Leg of clay vessel. Colour, red. (1/2). (Cat. No. 1900. 3. 9.35).
- Fig. 2. Leg of clay vessel. Colour, blackish; the incisions are filled with white paint. (1/2). (Cat. No. 1900. 3. 9.44).
- Fig. 3. Leg of clay vessel. Colour, red. (1/2). (Cat. No. 1900. 3. 7.47).
- Fig. 4. Leg of clay vessel. Colour, red, (1/2). (Cat. No. 1900. 3. 9.34).
- Fig. 5. Leg of clay vessel. Colour, red. (1/2). (Cat. No. 1900. 3. 9.45).
- Fig. 6. Leg of clay vessel. Colour, red.  $(\frac{1}{2})$ . (Cat. No. 1900. 3. 9.33).
- Fig. 7. Leg of clay vessel. Colour, red.  $(^{1}/_{2})$ . (Cat. No. 1900. 3. 9.38).
- Fig. 8. Leg of clay vessel. Colour, red. (1/2). (Cat. No. 1900. 3. 9.39).
- Fig. 9. Leg of clay vessel. Colour, red.  $(\frac{1}{2})$ . (Cat. No. 1900. 3. 9.40).
- Fig. 10. Leg of clay vessel. Colour, red.  $(^{1}/_{2})$ . (Cat. No. 1900. 3. 9.41).
- Fig. 11. Leg of clay vessel. Colour, red.  $(\frac{1}{2})$ . (Cat. No. 1900. 3. 9.36).

## FINDS IN GRAVES OF GROUP III, OROSI. (See p. 161).

- Fig. 12. Human figure of stone. a in Grave 3. ( $\frac{1}{2}$ ). (Cat. No. 1900. 3. 9 303).
- Fig. 13. Stone implement.  $\delta$  in Grave 2. ( $\frac{1}{2}$ ). (Cat. No. 1900. 3. 9.302).
- Fig. 14. Chip of greenstone. a in Grave 2. ( $\frac{1}{2}$ ). (Cat. No. 1900. 3. 9.301).



#### PLATE 53.

#### FINDS IN GRAVES OF GROUP II, OROSI.

- Fig. 1. Clay vessel. (1/2).  $\delta$  in Grave 2. P. 160. (Cat. No. 1900. 3. 9.167).
- Fig. 2. Stone implement.  $\binom{1}{2}$ . a in Grave 5. P. 160. (Cat. No. 1900. 3. 9.169).
- Fig. 3. Clay vessel. (1/2).  $\delta$  in Grave 5. P. 160. (Cat. No. 1900. 3. 9.170).
- Fig. 4. Stone implement. ( $^{1}/_{2}$ ).  $\delta$  in Grave 6. P. 160. (Cat. No. 1900. 3. 9.174).
- Fig. 5. Human head of clay. (1/2). a in Grave 3. P. 160. (Cat. No. 1900. 3. 9.168).
- Fig. 6. Human figure of stone.  $\binom{1}{2}$ .  $\alpha$  in Grave 2. P. 159. (Cat. No. 1900. 3. 9.166).
- Fig. 7. Handle of a clay spoon. (1/2). d in Grave 5. P. 161. (Cat. No. 1900. 3. 9.172).
- Fig. 8. Clay vessel. (1/2).  $\alpha$  in Grave 6. P. 161. (Cat. No. 1900. 3. 9.173).

#### SPORADIC FINDS WITHIN GROUP III, OROSI.

- Fig. 9. Leg of clay vessel. Colour, red, with black paintings.  $\binom{1}{2}$ . P. 161.
- Fig. 10. Bird of clay. Colour, red. The impressions intended for wings have apparently been made with some seal-like instrument.  $\binom{1}{1}$ . P. 161.



#### PLATE 54.

### FINDS IN GRAVES OF GROUP V. OROSI. (Exception, Fig. 2).

- Fig. 1. Clay vessel. Close to Grave 5. (1/2). P. 165. (Cat. No. 1900. 3. 9.368).
- Fig. 2. Fragment of clay vessel (a tail?). Sporadic find within Group IV.  $(^1/_2)$ . P. 163. (Cat. No. 1900. 3. 9.348).
- Fig. 3. Polishing-stone. c in Grave 8. (1/2). P. 166. (Cat. No. 1900. 3. 9.376).
- Fig. 4. Stone implement. b in Grave 8. ( $\frac{1}{2}$ ). P. 166. (Cat. No. 1900. 3. 9.375).
- Fig. 5. Spoon of clay. b in Grave 6. (1/2). P. 166. (Cat. No. 1900. 3. 9.370).
- Fig. 6. Stone implement. b in Grave 7. ( $\frac{1}{2}$ ). P. 166. (Cat. No. 1900. 3. 9.372).
- Fig. 7. Ring of clay. Close to Grave 22. (1/2). P. 170. (Cat. No. 1900. 3. 9.400).
- Fig. 8. Stone implement. b in Grave 22. (1/2). P. 170. (Cat. No. 1900. 3. 9.397).
- Fig. 9. Clay vessel. Close to Grave 7. (1/2). P. 166. (Cat. No. 1900. 3. 9.371).
- Fig. 10. Clay vessel. a in Grave 6. ( $\frac{1}{2}$ ). P. 165. (Cat. No. 1900. 3. 9.173).
- Fig. 11. Stone implement. a in Grave 8. ( $\frac{1}{2}$ ). P. 166. (Cat. No. 1900). 3. 9.374.)



11.

#### PLATE 55.

#### FINDS IN GRAVES OF GROUP V, OROSI.

- Fig. 1. Clay vessel. c in Grave 20. ( $\frac{1}{2}$ ). P. 169. (Cat. No. 1900. 3. 9.394).
- Figs. 2, 3. Human head of stone. b in Grave 47. ( $\frac{1}{2}$ ). P. 177. (Cat. No. 1900. 3. 9.445).
- Fig. 4. Clay vessel. a in Grave 26. ( $\frac{1}{2}$ ). P. 171. (Cat. No. 1900. 3. 9.408).
- Fig. 5. Clay vessel. a on the roof of Grave 12. ( $\frac{1}{2}$ ). P. 168. (Cat. No. 1900. 3. 9.382).
- Fig. 6. Clay vessel. b in Grave 12. (1/2). P. 167. (Cat. No. 1900. 3. 9.384).
- Fig. 7. Stone implement. b in Grave 27. (1/2). P. 172. (Cat. No. 1900. 3. 9.413).
- Fig. 8. Stone implement. a in Grave 27. (1/2). P. 172. (Cat. No. 1900. 3. 9.412).
- Fig. 9. Stone implement. a in Grave 21.  $(\frac{1}{2})$ . P. 170. (Cat. No. 1900. 3. 9.395).
- Fig. 10. Stone implement. b in Grave 23. ( $\frac{1}{2}$ ). P. 171. (Cat. No. 1900. 3. 9.403).
- Fig. 11. Stone implement. c in Grave 27.  $\binom{1}{2}$ . P. 172. (Cat. No. 1900. 3. 9.414).



#### PLATE 56.

#### FINDS IN GRAVES OF GROUP V, OROSI.

Figs. 1, 2. — Clay vessel. a in Grave 36. — ( $\frac{1}{2}$ ). P. 174. (Cat. No. 1900. 3. — 7.426).

Fig. 3. — Stone vessel. b in Grave 36. — (1/2). P. 174. (Cat. No. 1900. 3. — 7.427).



#### PLATE 57.

#### FINDS IN GRAVES OF GROUP V, OROSI.

- Fig. 1. Clay vessel. a in Grave 43. ( $\frac{1}{2}$ ). P. 175. (Cat. No. 1900. 3. 9.433).
- Fig. 2. Stone figure, human. *a.* in Grave 62.  $(\frac{1}{2})$ . P. 182. (Cat. No. 1900. 3. 9.474).
- Fig. 3. Stone implement, c in Grave 58. ( $\frac{1}{2}$ ). P. 180. (Cat. No. 1900. 3. 9.467).
- Fig. 4. Stone implement. b in Grave 58. (1/2). P. 180. (Cat. No. 1900. 3. 9.466).
- Fig. 5. Stone implement. *a* in Grave 58. (1/2). P. 180. (Cat. No. 1900. 3. 9.448).
- Fig. 6. Upper part of clay vessel. Close to Grave 50.  $(\frac{1}{3})$ . P. 177. (Cat. No. 1900. 3. 9.448).
- Fig. 7. Stone implement. a in Grave 57. ( $\frac{1}{2}$ ). P. 180. (Cat. No. 1900. 3. 9.464).
- Fig. 8. Clay vessel. On the roof of Crave 54. P. 179. (Cat. No. 1900. 3. 9.453).
- Fig. 9. Stone implement.  $\delta$  in Grave 62. ( $\frac{1}{2}$ ). P. 182. (Cat. No. 1900. 3. 9.475).



#### PLATE 58.

#### FINDS WITHIN GROUP V, OROSI.

- Fig. 1. Clay vessel. a in Grave 28. ( $\frac{1}{2}$ ). P. 172. (Cat. No. 1900. 3. 9.416).
- Fig. 2. Cover for a clay vessel. Sporadic find. (1/2). P. 184. (Cat. No. 1900. 3. 9.651).
- Fig. 3. Seal of clay. Sporadic find.  $\binom{1}{1}$ . P. 183. (Cat. No. 1900. 3. 9.496).
- Fig. 4. Human head of clay. Sporadic find.  $\binom{2}{3}$ . P. 183. (Cat. No. 1900. 3. 9.492).
- Figs. 5, 6, 7. Clay vessel; life shape, forming the joint body of two old women. The vessel is of yellowish colour and almost covered with paintings of quadruped animals in red, each with a smaller one in more or less degenerate form on the back. This strange vessel was found in a grave in the W. portion of the group. (1/2). P. 180.
- Fig. 8. Clay vessel.  $\epsilon$  in Grave 59. ( $\frac{1}{2}$ ). P. 181. (Cat. No. 1900. 3. 9.471).
- Fig. 9. Clay vessel, small, wide-mouthed tripod, with conical body and lofty rim, slightly curved outwards. Round the body there runs an incised ornamental band, inlaid with white paint. The colour of the vessel is a cinnamon red, but the rim is reddish brown. Legs in the shape of lizards. Found in the W. section of the group. (1/2). P. 184. (Cat. No. 1900. 3. 9.641).
- Fig. 10. Human arm of clay. Sporadic find. (1/1). P. 183. (Cat. No. 1900. 3. 9.494).



#### PLATE 59.

### FINDS WITHIN GROUP V, OROSI. (See p. 184).

- Fig. 1. Handle (?) of clay vessel. (1/2). Close to Grave 60. P. 182. (Cat. No. 1900. 3. 9.472, a).
- Fig. 2. Handle (?) of clay vessel. ( $\frac{1}{2}$ ). Close to Grave 60. P. 182. (Cat. No. 1900. 3. 9.472,  $\delta$ ).
- Fig. 3. Handle (?) of clay vessel. (1/2). Close to Grave 60. P. 182. (Cat. No. 1900. 3. 9.472, c).
- Fig. 4. Clay vessel, lower portion of.  $(^{1}/_{2})$ . Close to Grave 60. P. 182. (Cat. No. 1900. 3. 9.472, d).
- Fig. 5. Clay vessel. (1/2). Close to Grave 60. P. 182. (Cat. No. 1900. 3. 9.473).
- Fig. 6. Bird of clay (handle?). (1/2). Sporadic find within the W. section of Group V. P. 184.

  (Cat. No. 1900. 3. 9.658).
- Fig. 7. Bird's head of clay. (1/2). Sporadic find within the W. section of Group V. P. 184.

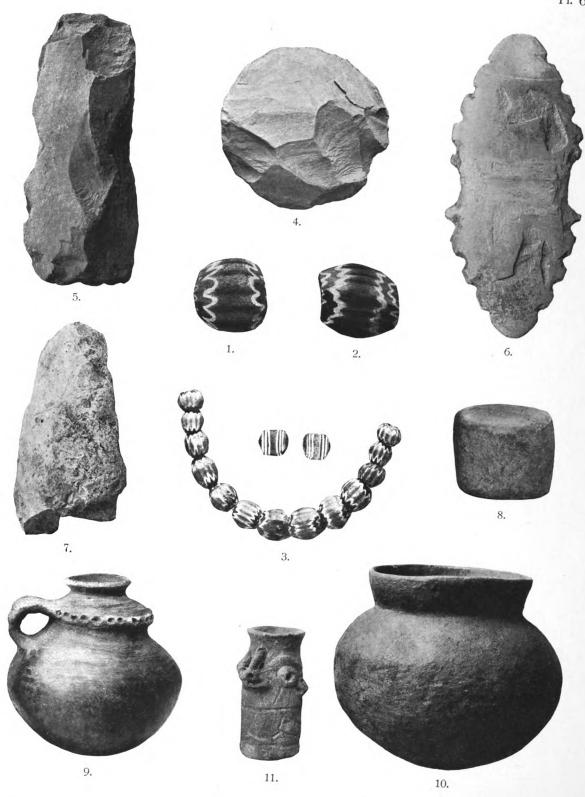
  (Cat. No. 1900. 3. 9.655).



#### PLATE 60.

## FINDS IN GRAVES OF GROUP V, OROSI. (Exception Fig. 11).

- Figs. 1, 2. Beads of glass, »Millefiori».  $(2^{1}/_{2})$ . c in Grave 43. P. 175. (Cat. No. 1900. 3. 9.435).
- Fig. 3. Beads of glass, Millefiori». (1/i). c in Grave 43. P. 175. (Cat. No. 1900. 3. 9.435).
- Fig. 4. Stone implement (?).  $(\frac{1}{2})$ .  $\alpha$  in Grave 37. P. 174. (Cat. No. 1900. 3. 9.429).
- Fig. 5. Stone implement. (1/2). f in Grave 46. P. 176. (Cat. No. 1900. 3. 9.443).
- Fig. 6. Stone implement. (1/2). b in Grave 44. P. 176. (Cat. No. 1900. 3. 9.437).
- Fig. 7. Stone implement. (1/2). a in Grave 44. P. 176. (Cat. No. 1900. 3. 9.436).
- Fig. 8. Stone implement. (1/2). c in Grave 46. P. 176. (Cat. No. 1900. 3. 9.440).
- Fig. 9. Clay vessel. (1/2). a in Grave 38. P. 174. (Cat. No. 1900. 3. 9.431).
- Fig. 10. Clay vessel. (1/3). d in Grave 46. P. 176. (Cat. No. 1900. 3. 9.441).
- Fig. 11. Drum, imitation of, in clay. Sporadic find within Group V.  $(^2/_3)$ . P. 183. (Cat. No. 1900. 3. 9.525).



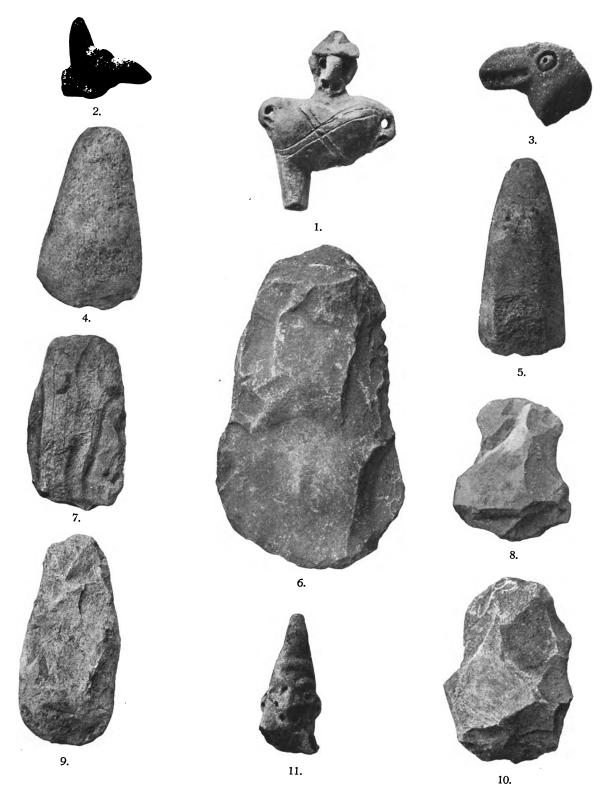
#### PLATE 61.

# SPORADIC FINDS WITHIN GROUP V, OROSI. (See p. 183).

- Fig. 1. Human figure of clay, hollow. Colour, red. (1/1). (Cat. No. 1900. 3. 9.529).
- Fig. 2. Bird's head of clay. Colour, red. (1/2). (Cat. No. 1900. 3. 9.527).
- Fig. 3. Bird's head of clay. Colour, red. (1/2). Within the W. section of Group V. P. 184.

  (Cat. No. 1900. 3. 9.654).
- Fig. 4. Stone implement.  $({}^{1}/_{2})$ . (Cat. No. 1900. 3. 9.530).
- Fig. 5. Stone implement. (1/2). (Cat. No. 1900. 3. 9.532).
- Fig. 6. Stone implement.  $\binom{1}{2}$ . (Cat. No. 1900. 3. 9.553).
- Fig. 7. Stone implement. (1/2). (Cat. No. 1900. 3. 9.542).
- Fig. 8. Stone implement.  $\binom{1}{2}$  (Cat. No. 1900. 3. 9.559).
- Fig. 9. Stone implement.  $\binom{1}{2}$ . (Cat. No. 1900. 3. 9.540).
- Fig. 10. Stone implement.  $\binom{1}{2}$ . (Cat. No. 1900. 3. 9.556).
- Fig. 11. Handle of a clay spoon.  $\binom{1}{2}$ . (Cat. No. 1900. 3. 9.493).

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#### PLATE 62.

## FINDS WITHIN THE W. SECTION OF GROUP V, OROSI. (See p. 184).

- Figs. 1, 2. Upper half of a human figure of stone. In its right hand it holds against its breast a small human head, and in its left hand against its back an axe. (1/2).

  (Cat. No. 1900. 3. 9.671).
- Fig. 3. Animal's head of clay. Colour, red. (1/2). (Cat. No. 1900. 3. 9.483).
- Fig. 4. Metate (stone), imitation of a jaguar. (1/3). (Cat. No. 1900. 3. 9.469).
- Fig. 5. Bird's head of clay. Colour, red. (1/1). (Cat. No. 1900. 3. 9.924).
- Fig. 6. Alligator's (?) head of clay. Colour, red. (1/1). (Cat. No. 1900. 3. 9.927).
- Fig. 7. Core, greenstone.  $(\frac{1}{2})$ . (Cat. No. 1900. 3. 9.691).
- Fig. 8. Core, greenstone. (1/2). (Cat. No. 1900. 3. 9.692).
- Fig. 9. Alligator's tail of clay. Colour, red.  $(\frac{1}{2})$ . (Cat. No. 1900. 3. 9.930).



#### PLATE 63.

FINDS WITHIN THE W. SECTION OF GROUP V, OROSI.

. (See p. 184).

Fig. 1. — Discs of fire-clay as found, with part of framework of burnt clay. —  $\binom{1}{1}$ . (Cat. No. 1900. 3. — 9.649).

Fig. 2. — Discs of fire-clay, (Fig 1 seen from the under side). —  $\binom{1}{1}$ .

Fig. 3. — Piece of gilded copper-foil. —  $(^2/_1)$ . (Cat. No. 1900. 3. — 9.650).

Fig. 4. — Piece of gilded copper-foil. (Fig. 3, inverted). —  $\binom{2}{1}$ .



#### PLATE 64.

## FINDS WITHIN THE COFFEE-PLANTATION, OROSI. (See p. 185).

- Fig. 1. (Half of a) Shallow bowl of clay; imitation of a jaguar. Colour, yellowish with painted ornaments in black and red. (1/2). (Cat. No. 1900. 3. 9.798).
- Fig. 2. Clay vessel, consisting of three small joint shallow bowls, each with one leg. Colour, red. (1/2).

  (Cat. No. 1900. 3. 9.763).
- Fig. 3. Leg of clay vessel. Colour, red.  $\binom{1}{2}$ . (Cat. No. 1900. 3. 9.806).
- Fig. 4. Leg of clay vessel. Colour, red.  $\binom{1}{2}$ . (Cat. No. 1900. 3. 9.798).
- Fig. 5. Vessel with small mouth and rounded bottom, nearly triangular in shape when seen from above; there is a face in relief at each corner. Colour, red. (1/2).

  (Cat. No. 1900. 3. 9.706).
- Fig. 6. Small tripod cup with upright walls. Colour, blackish; the incised ornaments are inlaid with white paint. Legs in the shape of heads, painted white. (1/2).

  (Cat. No. 1900. 3. 9.781).
- Fig. 7. Tripod vessel with globular body and small mouth, richly adorned with ornaments in relief. Colour, red. (1/2).

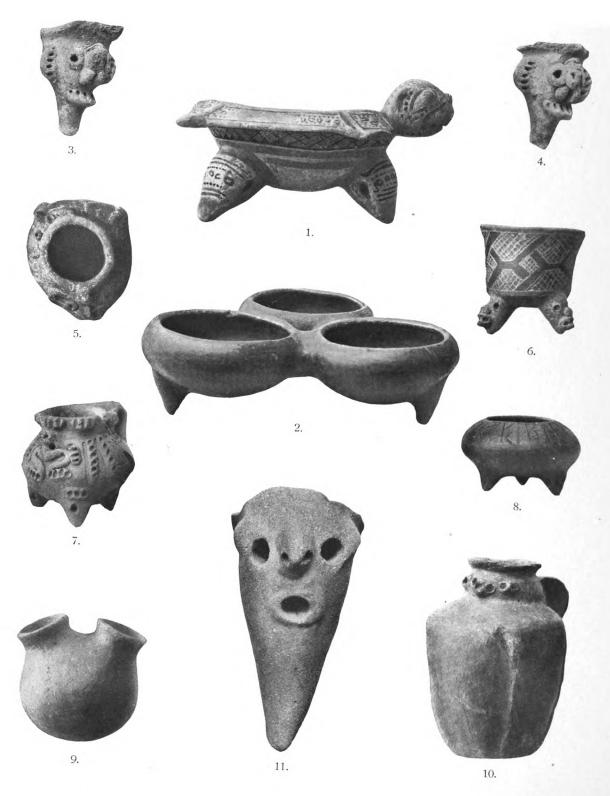
  (Cat. No. 1900. 3. 9.742).
- Fig. 8. Small, depressed globular, tripod vessel, adorned with incised ornaments, consisting of a zig-zag line alternating with two transverse, parallel lines. Colour, red but darkened by soot.  $\binom{1}{2}$ . (Cat. No. 1900. 3. 9.773).

- Fig. 9. Small vessel with globular body and two small mouths with narrow rims. Colour, red.  $(\frac{1}{2})$ . (Cat. No. 1900. 3. 9.731).
- Fig. 10. Jug with a broad looped handle. The walls show four vertical impressions. The rim is adorned with an animal face in relief. Colour, red. (1/2). (Cat. No. 1900. 3. 9.889).
- Fig. 11. Leg of large clay vessel; shape, conical, with a human face; greatly resembles a specimen found on the East coast. See Pl. 8, Fig. 5. Colour, red.  $\binom{1}{2}$ . (Cat. No. 1900. 3. 9.801).

nouths with narrow

v four vertical imin relief. Colour,

nan face; greatly e Pl. 8, Fig. 5.



#### PLATE 65.

## FINDS WITHIN THE COFFEE-PLANTATION, OROSI. (See p. 185).

- Fig. 1. Fragment of clay-vessel of yellow colour with painted ornaments in red.  $\binom{1}{1}$ . (Cat. No. 1900. 3. 9.966).
- Fig. 2. Vessel, large, tripod, with upright but slightly curved walls. On each side there is a painted rectangular panel with two human figures opposite each other but united by a common body. Legs in the shape of human heads. Colour, red. (1/2). (Cat. No. 1900. 3. 9.883).
- Fig. 3. Bowl, tripod of hemispherical shape, adorned with a small animal head at each end; rim turned outwards. Designs in red and black on cream-coloured ground. Legs missing. (1/2).

  (Cat. No. 1900. 3. 9.797).
- Fig. 4. Bird's head of clay. Colour, red. (1/2). (Cat. No. 1900. 3. 9.923).
- Fig. 5. Bird's head of clay. Colour, red. (1/2). (Cat. No. 1900. 3. 9.926).
- Fig. 6. Animal's head of clay, mutilated. Colour, red. (1/2). (Cat. No. 1900. 3. 9.908).
- Fig. 7. Animal's head of clay. Colour, red.  $\binom{1}{2}$ . (Cat. No. 1900. 3. 9.911).
- Fig. 8. Leg of clay vessel, adorned with an animal figure in relief and with two pair of slits. Colour, yellowish.  $\binom{1}{2}$ . (Cat. No. 1900. 3. 9.807).
- Fig. 9. Fragment of clay vessel, a handle (?). Colour, red. (1/2). (Cat. No. 1900. 3. 9.940).

- Fig. 10. Small tripod cup of clay. Colour, red. (1/1). (Cat. No. 1900. 3. 9.780).
- Fig. 11. Small jug adorned with an animal's head in relief in the front with punctate markings and incised lines on the shoulder, ha and rim.  $\binom{1}{2}$ . (Cat. No. 1900. 3. 9.891).



#### PLATE 66.

## FINDS WITHIN THE COFFEE-PLANTATION, OROSI. (See p. 185).

- Figs. 1, 2, 3. Jaguar's head conventionalized, sculptured in fine-grained basalt lava and adorned with one small human head on the top of its own head and another on each side serving as an ear.  $(^1/_3)$ . (Cat. No. 1900. 3. 9.1874).
- Figs. 4, 5. Fragments of a vessel-stand of basalt lava; it consists of two rings connected with each other by small human figures.  $(^{1}/_{2})$ . (Cat. No. 1900. 3. 9.1871 a, b).
- Fig. 6. Stone figure, human.  $(^{1}/_{2})$ . (Cat. No. 1900. 3. 9.1865).
- Fig. 7. Stone figure, the flute-playing god. (1/2). (Cat. No. 1900. 3. 9.1860).
- Fig. 8. Stone figure, the flute-playing god.  $(^1/_2)$ . (Cat. No. 1900. 3. 9.1861).



## PLATE 67.

# FINDS WITHIN THE COFFEE PLANTATION, OROSI. (See p. 186.)

Fig. 1. — Stone implement. —  $(\frac{1}{2})$ . (Cat. No. 1900. 3. — 9.1841).

Fig. 2. — Stone implement. — (1/2). (Cat. No. 1900. 3. — 9.1284).

Fig. 3. — Stone implement. — (1/2). (Cat. No. 1900. 3. — 9.1285).

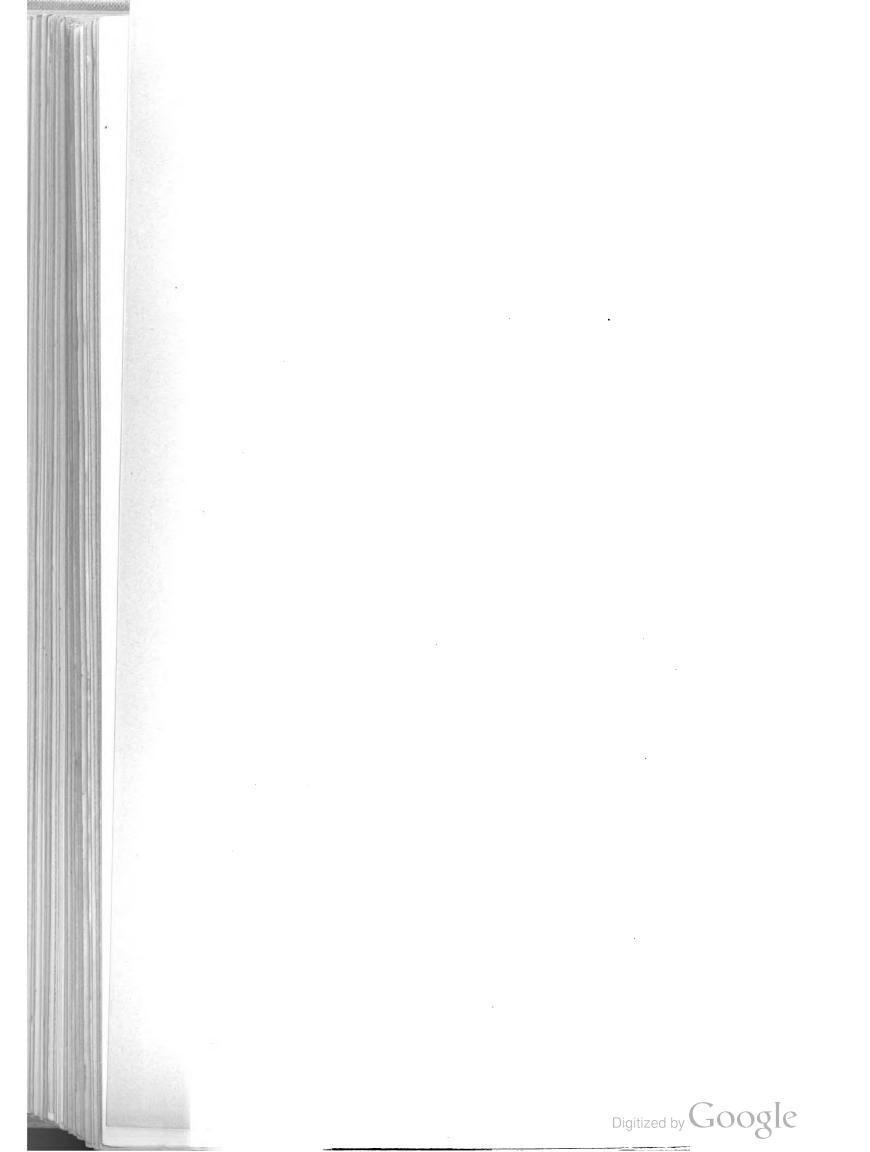
Fig. 4. — Stone implement. — (1/2). (Cat. No. 1900. 3. — 9.1282).

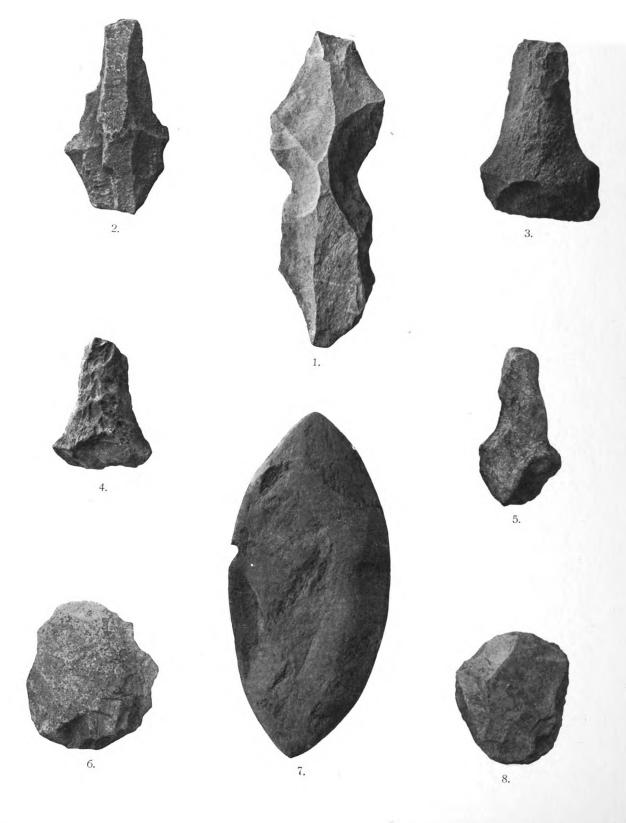
Fig. 5. — Stone implement. — (1/2). (Cat. No. 1900. 3. — 9.1286).

Fig. 6. — Stone implement. — (1/2). (Cat. No. 1900. 3. — 9.1234).

Fig. 7. — Stone implement. —  $\binom{1}{2}$ . (Cat. No. 1900. 3. — 9.1364).

Fig. 8. — Stone implement. — (1/2). (Cat. No. 1900. 3. — 9.1238).





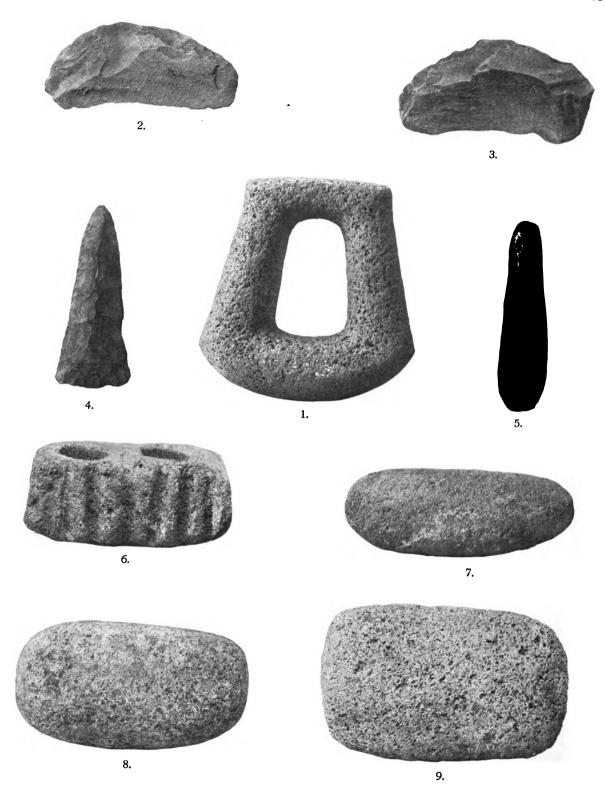
#### PLATE 68.

### FINDS WITHIN THE COFFEE-PLANTATION, OROSI.

(See p. 185).

- Fig. 1. Grinding-stone, stirrup-shaped, of basalt lava.  $(\frac{1}{2})^{1}$ . (Cat. No. 1900. 3. 9.1369).
- Fig. 2. Stone implement, sickle-shaped. (1/2). (Cat. No. 1900. 3. 9.1853).
- Fig. 3. Stone implement, sickle-shaped. (1/2). (Cat. No. 1900. 3. 9.1852).
- Fig. 4. Spear-head, chipped, of aphanite. (1/2). (Cat. No. 1900. 3. 9.1376).
- Fig. 5. Stone implement, polished. (1/2). (Cat. No. 1900. 3. 9.1297).
- Fig. 6. Stone receptacle of basalt lava with two small compartments. (1/2). (Cat. No. 1900. 3. 9.1866).
- Fig. 7. Grinding-stone.  $(\frac{1}{2})$ . (Cat. No. 1900. 3. 9.1378).
- Fig. 8. Grinding-stone.  $(\frac{1}{2})$ . (Cat. No. 1900. 3. 9.1366).
- Fig. 9. Grinding-stone of basalt lava. (1/2). (Cat. No. 1900. 3. 9.1367).

<sup>&</sup>lt;sup>1</sup> This form I also met with during excavations on the Pacific Coast.



#### PLATE 69.

## FINDS WITHIN THE COFFEE-PLANTATION, OROSI. (See p. 185).

Fig. 1. — Human head of basalt lava. — (1/2). (Cat. No. 1900. 3. — 9.1868).

Fig. 2. — Human head of basalt lava. —  $(\frac{1}{2})$ . (Cat. No. 1900. 3. — 9.1867).

Fig. 3. — Handle of a clay-spoon; shape, a small head provided with crossed arms. (Cat. No. 1900). 3. — 9.951.)

Fig. 4. — Grinding-stone. — (1/2). (Cat. No. 1900. 3. — 9.1392).

Fig. 5. — Animal's head of clay, hollow. Colour, red. — (1/2). (Cat. No. 1900. 3. — 9.915).

Fig. 6. — Animal's body of clay. Colour, red. — (1/2). (Cat. No. 1900. 3. — 9.944).

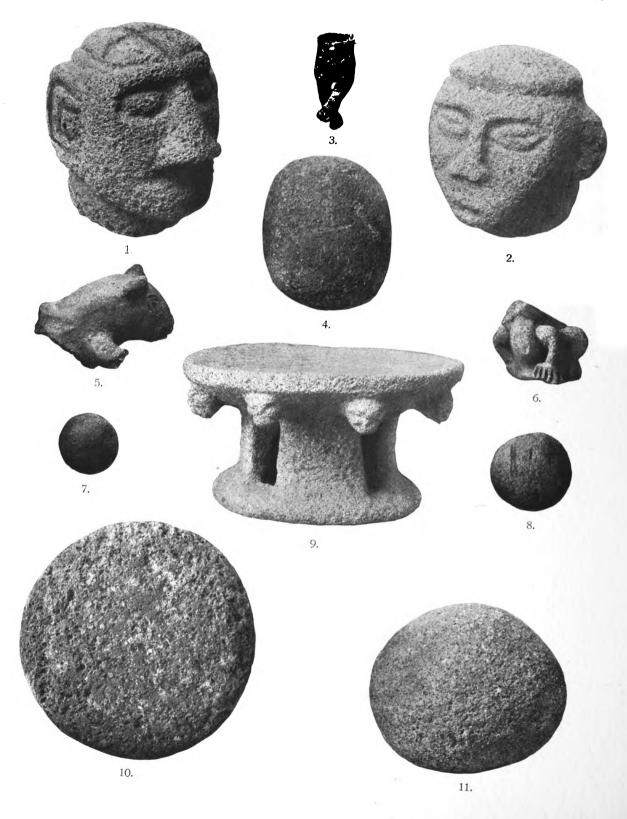
Fig. 7. — Rattle-ball of clay. —  $\binom{1}{1}$ . (Cat. No. 1900. 3. — 9.963).

Fig. 8. — Rattle-ball of clay. —  $\binom{1}{1}$ . (Cat. No. 1900. 3. — 9.962).

Fig. 9. — Table of stone, base hollow with four vertical, oblong perforations.— ( $\frac{1}{3}$ ). (Cat. No. 1900. 3. — 9.1374).

Fig. 10. — Stone disc, flat, 4 cm. thick. Use unknown. —  $\binom{1}{2}$ . (Cat. No. 1900. 3. — 9.1365).

Fig. 11. — Ball of stone. —  $\binom{1/3}{3}$ . (Cat. No. 1900. 3. — 9.1855).



### PLATE 70.

## FIND IN THE BURIAL GROUND AT LAS HUACAS. (See p. 187).

Figs 1, 2. Large, hemispherical, tripod bowl of cream colour, richly adorned with designs in red, black and yellow. The interior decoration shows partitions with highly conventionalized animal and human(?) figures. The legs are grotesque, heads with painted designs. — (1/2). (Cat. No. 1900. 3. — 10.2).



### PLATE 71.

## FIND IN THE BURIAL GROUND AT LAS HUACAS. (See p. 187).

Figs. 1, 2. — Large, hemispherical, tripod bowl of a light yellowish colour, richly adorned with designs in brown, darkish yellow and black. The central piece of the interior decoration shows two extremely conventionalized heads and several arms in gyration. Compare Pl. 36 and the accompanying description. The broad zone on the inner wall is occupied by three groups of similar heads and arms extending in pairs from a central eye (?). The border on the is decorated with a fret-work pattern. The exterior decoration is simple. The legs are in the shape of eagles' heads. — (1/2).

(Cat. No. 1900. 3. — 10.1).



#### PLATE 72.

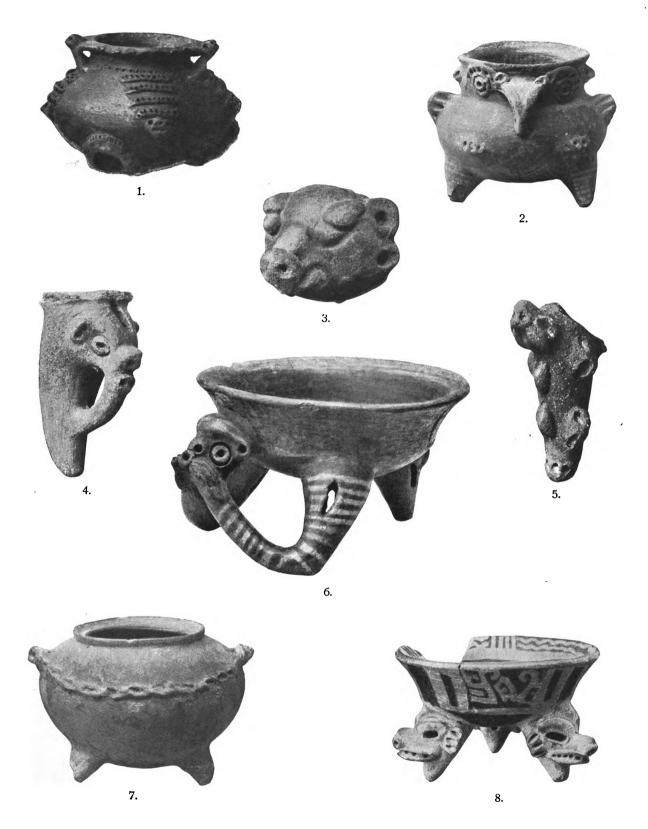
## FINDS IN THE BURIAL GROUND AT LAS HUACAS. (See p. 187).

- Fig. 1. Vessel, tripod, depressed globular, with two ears and adorned with animals' heads in relief and fillets with punctate markings. Legs missing. Colour, red. (1/2).

  (Cat. No. 1900. 3. 10.53).
- Fig. 2. Vessel, tripod, depressed globular, with an owl's face and wings in relief on each side. Colour, red; adorned with criss-cross designs painted white. (1/2).

  (Cat. No. 1900. 3. 10.32).
- Fig. 3. Animal's head of clay. Colour, red. (1/2). (Cat. No. 1900. 3. 10.108).
- Fig. 4. Leg of clay vessel; shape, animal's head. Colour, red.  $\binom{1}{2}$ . (Cat. No. 1900. 3. 10.99).
- Fig. 5. Leg of clay vessel; shape of a lizard. Colour, red. (1/2). (Cat. No. 1900. 3. 10.103).
- Fig. 6. Large, hemispherical, tripod bowl, with a human head projecting on one side. (1/2).

  (Cat. No. 1900. 3. 10.15).
- Fig. 7. Vessel, depressed globular, tripod, with rather wide mouth and with two small ears and an encircling cord on the shoulder. Colour, red.  $\binom{1}{2}$ . (Cat. No. 1900. 3. 10.52).
- Fig. 8. Shallow, tripod bowl with yellowish designs on the red ground. The legs are in the shape of grotesque heads. (1/2). (Cat. No. 1900. 3. 10.33).



### PLATE 73.

### FINDS IN THE BURIAL GROUND AT LAS HUACAS. (See p. 187).

- Fig. 1. Large, nearly hemispherical, tripod bowl, adorned on the outside with an incised partition, containing chequer designs, thrice repeated. The legs are in the shape of animals' heads. Colour, blackish. (1/2). (Cat. No. 1900. 10.8).
- Fig. 2. Large clay spoon with a handle in the shape of the slender head of some animal. Colour, red. (1/2).

  (Cat. No. 1900. 3. 10.94).
- Fig. 3. Large clay spoon with handle in the shape of a reptile's head. Colour, red. (1/2). (Cat. No. 1900. 3. 10.92).

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#### PLATE 74.

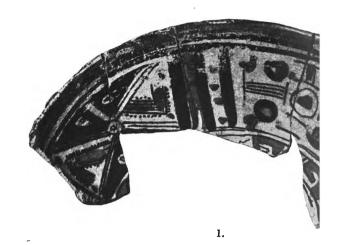
## FINDS IN THE BURIAL GROUND AT LAS HUACAS. (See p. 187).

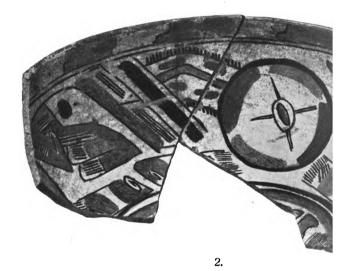
- Fig. 1. Fragment of a large hemispherical bowl. Colour, yellow. The two designs are painted in black and red; one shows two triangular, highly conventionalized, human faces opposite each other, the other exhibits some symbolical geometrical design. (1/2).

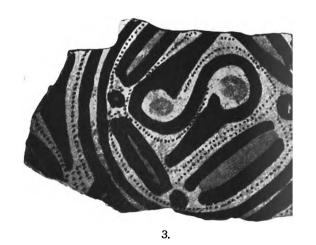
  (Cat. No. 1900. 3. 10.6).
- Fig. 2. Fragment of a large hemispherical bowl. Colour, yellow. The designs are painted in red, black, brown and orange. Two large-nosed, conventionalized faces, each with two pairs of arms, are to be seen.

  (Cat. No. 1900. 3. 10.3).
- Fig. 3. Fragment out of the bottom of a large bowl. Colour, bright yellow. The ornaments are painted in black. In the very centre there is a representation of a double-headed bird.  $\binom{1}{2}$ . (Cat. No. 1900. 3. 10.97).

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### PLATE 75.

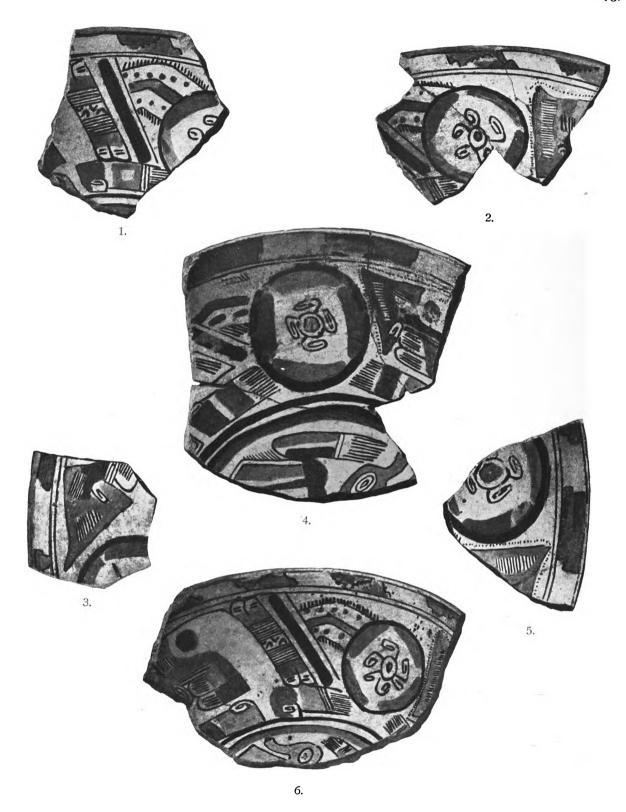
## FINDS IN THE BURIAL GROUND AT LAS HUACAS. (See p. 187).

Figs. 1—3. — Fragments of a large, hemispherical bowl, richly ornamented with designs in red, black, brown and orange on cream-coloured ground. The designs which are most plainly recognized are those of grotesque, conventionalized heads and arms alongside representations of a kind of swastika in the centre of a circle. — (1/2). (Cat. No. 1900. 3. — 10.7).

Figs. 4—6. — Fragments of a vessel resembling that given above. — (1/2). (Cat. No. 1900. 3. — 10.4).

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### PLATE 76.

### PURCHASE FROM THE TROYO COLLECTION.

(Exception Fig. 1.) (See p. 187).

Fig. 1. — Fragment of a large, shallow (jaguar-)bowl. It is adorned with designs in black on yellowish ground. The shaped figure is a highly conventionalized, double-headed bird or other creature. — (1/2). Compare Pl. 31, Figs. 1, 2 and the text p. 121. Found in the burial ground at Las Huacas.

(Cat. No. 1900. 3. - 10.5).

- Figs. 2—5. Fragments of a jaguar-bowl of the same colour as the above and with varying, conventionalized animal designs.  $(^{1}/_{2})$ . (Cat. No. 1900. 3. 14.4).
- Figs. 6, 7. Fragments of a jaguar-bowl. See the figure last described. (1/2). (Cat. No. 1900. 3. 14.16).

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### PLATE 77.

- Fig. 1. Large, hemispherical, tripod bowl with designs in red, black, yellow and orange on a whitish ground. The bottom inside shows a round human face. The rim is adorned with a zone with possibly animal figures alternating in black and red. The profile of the vessel is reproduced on Pl. 79, Fig. 1. (1/2). Found at País. (Cat. No. 1900. 3. 13.1).
- Fig. 2. Large hemispherical bowl on an annular base. Ground colour, whitish. The interior zone of the wall is occupied by four partitions with designs in red and black. There is a pair of human faces opposite each other, and between them a pair of loop-like designs, the meaning of which can not be given at present on account of the lack of intermediate forms. Compare Pl. 23, Figs. 1, 2 and the text P. 89. (1/2). Purchased from the Troyo collection. See p. 189. (Cat. No. 1900. 3. 14.13).

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### PLATE 78.

# FINDS AT EL PAÍS. (See p. 190).

Figs. 1, 2. — Large, hemispherical, tripod bowl of a yellow colour. The interior is covered with designs in black and red. Compare Pl. 23, Figs. 1, 2 and the text P. 89.

The legs are in the shape of heads. The outside decoration of the vessel is shown on Fig. 2. —  $(\frac{1}{3})$ .

(Cat. No. 1900. 3. — 13.1).

Figs. 3, 4. — Small, depressed globular vessel with small mouth, upright rim and two ears. It is almost covered with paintings, white parallel lines and criss-cross decorations, on a red ground. — (1/2). (Cat. No. 1900. 3. — 13.4).

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### PLATE 79.

Fig. 1. — Side view of bowl shown on Pl. 77, Fig. 1. See description of that plate.

Fig. 2. — Side view of bowl shown on Pl. 77, Fig. 2. See description of that plate.

Fig. 3. — Side view of bowl shown on Pl. 80, Fig. 2. See description of that plate.

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### PLATE 80.

- Fig. 1. Nearly hemispherical bowl on annular base. Colour, yellow, richly ornamented in red and black. The hollow base contains small rattling clay balls. (1/2). Found within the coffee-plantation at, Orosi. P. 186. (Cat. No. 1900. 3. 9.887).
- Fig. 2. Large, hemispherical, tripod bowl of a whitish colour. The whole of the interior is covered with designs in red and black. The centrepiece shows a pair of most realistic animal figures. The zone of the wall is divided into two partitions with highly conventionalized representations of animals' heads. The side view of this vessel is reproduced on Pl. 79, Fig. 3. (1/2). Purchased from the Troyo collection. P. 189.

(Cat. No. 1900. 3. — 14.5).

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### PLATE 81.

## PURCHASE FROM THE TROYO COLLECTION. (See p. 189).

Figs. 1, 2. — Large, hemispherical bowl of cream colour, richly adorned with designs in red, black, yellow and brown. In the interior the circular bottom is occupied by a human figure and the wall decoration is divided into three partitions, which are separated from each other in each case by a circle containing a kind of swastika. Each partition shows a head with arms. Compare with Pl. 87 and see the text, p. 114. The border decoration is a kind of fret-work. The exterior is decorated with simple bands in red and black. The legs are in the shape of human heads. — (1/2).

(Cat. No. 1900. 3. — 14.7).



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### PLATE 82.

## PURCHASE FROM THE TROYO COLLECTION. (See p. 189).

Figs. 1, 2. — Large hemispherical bowl on a low annular base. Colour, yellow. The interior wall is wholly occupied by a broad tripartite zone, filled with highly conventionalized designs of human heads and arms. Compare Pl. 29, 36, 81 and 87. See also the text p. 114. (Cat. No. 1900. 3. — 14.12).



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### PLATE 83.

# PURCHASE FROM THE TROYO COLLECTION. (See p. 190.)

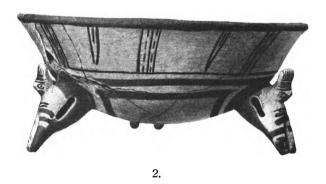
Figs. 1, 2. — Large hemispherical, tripod bowl of yellowish colour, richly adorned with designs in black and red. Resembles Pl. 23 and Pl. 78. —  $\binom{1}{3}$ . (Cat. No. 1900. 3. — 14.1).

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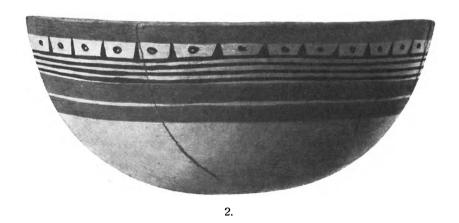
### PLATE 84.

## PURCHASE FROM THE TROYO COLLECTION. (See p. 189.)

Figs. 1, 2. — Large hemispherical bowl, cream-coloured, richly adorned with designs in red and black. The interior is almost filled with the design of two human figures opposite each other, with a common circular body. —  $\binom{1}{2}$ .

(Cat. No. 1900. 3. — 14.8).





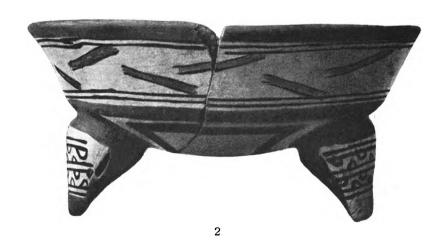
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### PLATE 85.

# PURCHASE FROM THE TROYO COLLECTION. (See p. 189).

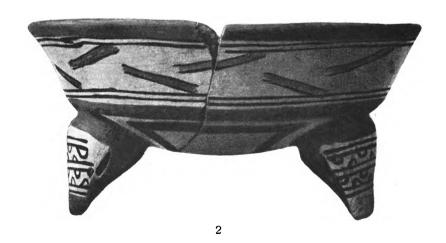
Figs. 1, 2 — Large, hemispherical, tripod bowl of a yellow colour, richly adorned with designs in red and black. The interior decoration below the border consists of a human figure with lofty head-dress. — (1/2). (Cat. No. 1900. 3.—14.15).





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### PLATE 86.

## PURCHASE FROM THE TROYO COLLECTION. (See p. 189).

- Fig. 1. Human female figure of basalt lava.  $\binom{1}{5}$ . (Cat. No. 1900. 3. 14.185).
- Fig. 2. Leg of clay vessel; shape eagle's (?) head. Colour, yellow with red ornaments.  $(\frac{1}{2})$ . (Cat. No. 1900. 3. 14.122).
- Fig. 3. Handle of a clay-spoon; shape of a lizard. Colour, red. -(1/2). (Cat. No. 1900. 3. 14.158).
- Fig. 4. Bird's head of clay. Colour, red. (1/2). (Cat. No. 1900. 3. 14.150).
- Fig. 5. Handle (?) broken, with an animal effigy at the end. Colour, red. (1/2). (Cat. No. 1900. 3. 14.151).
- Fig. 6. Stool, hollow; of basalt lava. The walls are composed of two figures with outspread arms.  $\binom{1}{2}$ . (Cat. No. 1900. 3. 14.188).



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#### PLATE 87.

## PURCHASE FROM THE TROYO COLLECTION. (See p. 189).

Figs. 1, 2. — Large, hemispherical, tripod bowl of a yellowish colour, richly adorned with designs in red, black, brown and dark yellow. The circular bottom piece of the interior shows two heads opposite one another, each with one arm. The wall-decoration is divided into three partitions, each containing highly conventionalized human heads and arms. Compare with Pl. 29 and see the text, p. 114. The border decoration consists of a kind of fret-work. The exterior is furnished with simple band decorations in red and black. The legs are in the shape of heads. — (1/2).

(Cat. No. 1900. 3. — 14.6).



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